CASSAVA PRODUCTION AND ITS IMPACT ON THE SOCIO-ECONOMIC DEVELOPMENT OF PEASANTS IN NASARAWA STATE

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DISSERTATION SUBMITTED TO THE POSTGRADGUATE SCHOOL, BENUE STATE UNIVERSITY, MAKURDI, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF DOCTOR OF PHILOSOPHY(Ph.D) DEGREE IN POLITICAL SCIENCE

MARCH, 2017

CERTIFICATION

We certify that this thesis: Cassava Production and its Impact on the Socio-Economic Development of Peasants in Nasarawa State, has been duly presented by Idris Ali Mohammed (BSU/PoL/Ph.D/10/5449) of the Deparment of Political Science, Faculty of Social Sciences, Benue State University, Makurdi and has been approved by panel of examiners.

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DECLARATION

I, IDRIS ALI MOHAMMED (BSU/POL/Ph.D/10/5449) do hereby declare that even though I have benefited from the scholarly inputs of several authors and institutions, this work is mine. It is conceived, researched, and written solely by me. I therefore take exclusive responsibility for its strength and weakness.

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DEDICATION

This work is dedicated to my late father, Mallam Adamu Ibrahim Hafizy and my mother Hajiya Amina Ibrahim Mohammed. Also to my family members, friends, and well wishers.

ACKNOWLEDGMENTS

I wish to start by thanking Almighty God for His divine guidance, protection and for keeping me alive to achieve this academic endeavour.

Also I wish to express my appreciation to my supervisors Prof. Akase P. Sorkaa and Dr. Atah Pine for the time they took and the pains they had in supervising this work. I pray Almighty God to bless you with sound health and long life for others to benefit from you. I also wish to express my appreciation to the Head of Department, Political Science, Prof. Terkura Tarnande for motivating me to ensure that this thesis was completed.

My special appreciation goes to all lecturers in the Department of Poltical Science, Benue State University, Makurdi. Among them are Prof. Mvendaga Jibo, Prof. Tony Edoh, Prof. Adagba Okpaga, Prof. Oga Ajene, Dr. (Mrs) Member Geoge Genyi, Mr. Ahen Akaakuma, Dr. James Apam, Dr. Frank, Dr. Isa Okpe of Ecomonics Department, Benue State University, among others. They contributed in different ways to the success of this work. I am indeed grateful to you.

I also express my profound gratitude to my friends, brothers and sisters for their contribution toward the success of this study. The are Pharm Ahmed Yahaya, of Federal Medical Centre, Keffi, Mr. Yusuf Goya of CBN, Dr. Udofia, National Assembly, Abuja, Mr. Cletus, OC, SARS, Nasarawa State, my PhD Classmates, Dr. Jev Amos, Mr. Fada Samson, Mr. A. Gaavson, Mr. Patrick Modom, former Adviser to the Benue State Government on Commerce and Industry, Alh. Nuhu Mohammed, PA to the Speaker, Nas. State House of Assembly, Late Ibrahim Adamu Babasha, Manager, Alshams Nig. Ltd, (Dr) Bashir Shuaibu, Shuaibu's Hospital, Toto, Mal. Sanusi Baba Ganuwa, Works Dept, Toto LG, Hon. Abubakar Yusuf, Abubakar Ahege, Judiciary Abuja, Alh. Aliyu Usman Onairo, Mal. Ibrahim Abdullahi Waiya, National Cordinator, Northern Youth Assembly, Barr. Yakubu Muazu, Ministry of Justice, Abuja, Mr. Moses Obadiah Samu, of Gen. Std Dept, Nas. Poly, Lafia etc. Special regard to Alh Abubakar Moh'd, my Uncle Prince Aliyu Sani, former Chairman Toto Local Gov't and my big anti Hajiya Flo Abubakar Moh'd and Hon. Sidi Bako former member NSHA.

I owe special respect to my brother and friend Dr. Atah Pine, who not only sacrified his valuable time to read but also made valuable corrections and contributions culminating into the

success of this work. Special regards also go to Dr. T. Aliegba, Head of Dept, Pol Sci, Nasarawa State University, Keffi, Alh. Musa Moh'd Maikaya, R&D Dept NNPC Lagos, Alh. Yahaya I. Osada, FCT Universal Basic Education Boad, Dr. Moh'd Ogimba, Fed Med Centre, Keffi, ASI Musa Ibrahim Moh'd, Nigeria Immigration Services, Lagos, Alh. Musa Ahmed Musabdul Global Services Ltd, Abuja, Dr. Chiakaan Gbaden, Mass Com Dept, Mr Olaoti Segun Bashir, Sales Rep Choice Agrochemicals Ltd, Dr. Ojo, Social Dev Dept, Dr. Musa Dalhatu, Director Acadamic Planning all of Nasrawa State Polytechnic, Lafia for their support and contribution.

I also greatly appreciate the management of Nasarawa State Polytechnic, Lafia for given me the opportunity to go for this study. To all my colleagues in the School of General Studies and Pre-ND, especially my Dean Mr. Louis Ogah, Mall Iiya Dan Iliya, HOD Pre-ND, Mrs Shammah, HOD General Studies, Mrs Mary Linda Ogbele, Director Linkages, Mr Atlas Ameh, Cordinator, Entreprenureship Development Centre, Mr Danjuma Nesla, Former HOD General Studies, Mr Francis Adi, HOU Economic, Mall Usman Koku, HOU Citizenship Education, Mall Usman Musa Loko, Mr Bulus Adokwe, Mall Suleiman Ibrahim to mention just but a few.

Finally I am grateful to my students for their support and cooperation.

LIST OF ABBREVIATIONS

ADP ------Agricultural Development Project

ACP ------Agricultural Coordinating Project

ASUU ----Academic Staff Union of the University

AGR -----Ashitect Global Resource

BRTG ---Baiwa Root and Tuber Group

BNARDA-Benue State Agricultural and Rural Development Authority

CBN -----Central Bank of Nigeria

CTS ------Cassava Transformation Strategy

CMTDC –Cassava Market and Trade Development Corporation

CEDP ----Cassava Enterprise Development Project

CMDP---Cassava Mosaic Diseases Programme

CMP ----Cassava Multiplication Programme

CTA ----Cassava Transformation Agency

CFM ----Cassava Flour Mill

DRC ----Democratic Republic Congo

DFRRI –Directorate of Food, Roads and Rural Infrastructure

EU -------European Union

FAO -----Food and Agricultural Organization

FRN -----Federal Republic of Nigeria

FGD -----Focus Group Discussion

FADU----Farmers Development Union

FBPL ---Fertilizer Blending Plant, Lafia

FUA -----Fadama Users Association

GDP -----Gross Domestic Products

GATT –Great Agreement on Trade and Tarrif

GD -------Great Depression

GR ------Green Revolution

HQG ----High Quality Gari

IC -------Ivory Coast

IMF -----International Monetary Fund

IFAD ----International Fund for Agricultural Development

IITA -----International Institute for Tropical Agriculture

KMRTEPG –Kaibo Mada RTEP Group

MA ------Ministry of Agriculture

MNCs ---Multi National Corporations

NCP -----National Cassava Policy

NSMA –Nasarawa State Ministry of Agriculture

NCGA –Nigerian Cassava Growers Association

NSAZ –Nasarawa South Agricultural Zone

NWAZ –Nasarawa West Agricultural Zone

NCAZ –Nasarawa Central Agricultural Zone

NGS ----Northern Guinea Savana

SGS ----Southern Guinea Savana

NSS ----National Seed Services

NEPA –National Electric Power Authority

NBF ---National Fertilizer Board

NDE ---National Directorate of Employment

NPI ----National Planning on Immunization

NSBASS –Nasarawa State Badakoshi Agricultural Settlement Scheme

NMW ---National Minimum Wage

NE ----Normadic Education

NSMPB ---Nasarawa State Marketing and Produce Board

NDLEA ----National Druge Law and Enforcement Agency

NYSC ----National Youth Service Corps

NEPD ----National Enterprises Promotion Decree

NSIPP ---Nasarawa State Investment Promotion Programme

NLC -----Nigeria Labour Congress

NBA ----Nigeria Bar Association

NCI -----National Cassava Initiative

NSPFS ---National Special Programme for Food Security

NEEDS ---National Economic Empowerment and Development Strategy

NGO -----Non-Governmental Organization

NEPAD –New Partnership for African Development

NACRDB –Nigeria Agricultural Cooperative and Rural Development Bank

NRRI----National Rroot Research Institute

NCT ----Nigeria Cassava Transformation

NSS ---National Seed Services

NSM ---Nigeria Starch Mill

PME…Project Monetoring and Evaluation

PCU ---Project Cordinating Unit

OFN ---Operation Feed the Nation

RTEP ---Root and Tuber Expansion Programme

RBDA –River Basin Development Authority

SA -------South Africa

SGS -----Southern Guinea Savana

SWW ---Second World War

SG --- Sasakawa Global

TMS –Tropical Manihot Series

TW ----Third World

UFPES –Universal Free Primary Education Scheme

USA ---United States of America

USAID –United State Agency for International Development

UNIDO –United Nations Industrial Development Organization

WB ---World Bank

CONTENTS

ABSTRACT

The study investigates the impact of cassava production on the socio-economic development of peasants in Nasarawa State.The study uses descriptive survey research as its research design. The study adopts the Maxian political economy approach to evaluate the production process of cassava, its challenges and way forword. The findings of study revealed that investing in cassava production enterprise is profitable. Inter and Intra ethnic crises have displaced farmers from their farmland thereby affecting cassava production in the study area. It also revealed that peasant farmers faced various challenges in cassava production ranging from lack of credit facilities, improved cassava cuttings, fertilizers and tools.The study recommended for the mass education of people on the need for self-reliance and self-sufficiency in food production. Also to protect all prime agricultural lands for continued agricultural production.The study recommended for the need for group formation among peasant farmers to enable them have a greater voice in term of decision making process on land ownership and easy access to credit facility.Also that the campaign for cassava production should be extended to the nooks and crannies of the state.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Cassava is believed to have originated from Brazil and introduced into West Africa by the Portuguese and it is considered the most productive crop in the tropics. Apart from its high productivity and colorific content, it has advantages such as being "season" and its ability to store well in the soil for several months. This is why cassava has been described as the famine security crop (Alabi and Oviesogie, 2005).

Cassava is grown wildly as one of the most important staple crops in the tropics where it is adaptable to diverse environmental conditions and farming systems. Nigeria is one of the world's largest producers of cassava, one third more than the production in Brazil and almost doubles the production of Indonesia and Thailand which are also considered among the world leading producers of cassava. Cassava production in other African countries like the Democratic Republic of Congo, Madagascar, Mozambique, Tanzania and Uganda appear small in comparison to Nigeria's substantial output (FAO, 2004). In 2002 the Food Agricultural Organization of the United Nations in Rome estimated cassava production in Nigeria to be approximately 34 million tones. The comparison of the output of cassava to various crops in Nigeria indicates that cassava ranks first, followed by yam production at 27 million tones, millet at 6 million tones and rice at 5 million tones (FAO, 2004).

The production of cassava within the context of farming system and trade offers varying forms of employment to over 60 percent of the rural population. A large majority of the farmers in the rural areas operate at subsistence and smallholder level, with a large fraction of the agricultural output in the hands of these smallholder farmers whose average holding is about 1.0-3.0 hectares (CTA, 2000). Cassava provides for food security, employment creation, and income generation for crop producing households (Ugwu and Ukpai, 2002). Household food and nutrition security relies heavily on rural food production and this contributes substantially to poverty alleviation. Therefore, the first pillar of food security is sustainable production of food (Odurukwe, 2006). And cassava is one of the major staple foods that have the potential of fighting rural food insecurity and hunger in Nigeria.

The federal government of Nigeria has implemented different agricultural policies such as Accelerated Food Production Programme, Operation Feed the Nation, Green Revolution, Cassava Multiplication Programme, Root and Tuber Expansion Programme and National

Cassava Policy to provide food security, income and generate revenue to the country. The continued government efforts at encouraging cassava production cannot be unconnected with the fact that the crop is capable of transforming the nation's economy. Cassava can be transformed into cassava flour, cassava chips, garri and animal feeds to mention but a few. It can be used in industry for production of starch, malt, beer, ethanol, biscuit and bread among others. However, estimates of industrial cassava use in Nigeria suggest that approximately 16 percent of cassava root production was utilized as chips in animal feed, 5 percent was processed into syrup concentrate for soft drinks and less than 1 percent was processed into high quality cassava flour used in biscuit and confectionary, dextrin, adhesive, starch, and hydrolysates for pharmaceuticals and seasonings (Ene, 1992). A wide range of traditional cassava forms (such as garri, fuful, starch, lafun, abacha, etc) are produced for human consumption (Kormawa, 2003).

IITA (1992) reported that the ability of cassava to produce economic yields under low soil fertility and low input use has made it the preferred crop for resource poor farmers in most parts of Nigeria. It has been established that 60 percent of the country's population earn their living from small scale farm production (Oluwatayo, Sekumade and Adesoji, 2008). Cassava production in Nigeria is dominated by small farmers or poor peasants. It is predominantly (99%) by small farmers with 1-5 hectares of land intercropped with yams, maize or legumes in the rain forest and savannah agro-ecologies of southern, central and lately northern Nigeria. Indeed it is grown by almost every household in Nigeria. The annual output of cassava is estimated at about 45 million metric tonnes (Phillips, 2014; Hillocks, 2002). According to (IITA, 2009) Nasarawa State is among the major producer of cassava in the country with an annual yield of more than 2 million tones cultivated over an area of 120, 751 hectares. The crop has become very popular as food and cash crop and is fast replacing yam and other traditional staples.

Studies have shown that small farmers or peasants engaged much in cassava production because of its tolerance to extreme ecological stress conditions and poor soils, cassava plays a major role in reducing food insecurity and rural poverty (Chinaka, 1983). The cultivation of cassava has increased considerably in recent years owing to the realization of its application in animal feeds, starch and ethanol manufacture (FGN, 2004). Cassava has great potentials to contribute to the economy of Nigeria, being the world's largest producer of the commodity and potentially capable of producing 34-40 million tonnes per annum.

Studies in cassava production in Benue State indicate that cassava gained widespread acceptance as a 'saviour' crop being cropped by almost all households state-wide (BNARDA,

1997). The farm sizes of 78% of cassava producers range between 0.1 to o.2 ha (BNARDA, 1995). The four most important reasons farmers give as motivation for the production of cassava and other tuber crops in the state include food security, extra income, tradition and industrial raw materials (BNARDA, 1995). Nasarawa State stands to gain a lot from the numerous advantages of cassava as already enjoyed by its immediate neighbour, Benue State.

Compared to grains, cassava is more tolerant to low soil fertility and more resistant to drought, pests and diseases (Odoemenem and Otanwa, 2011). Obviously, cassava is a crop with a lot of potentials to provide food and energy, and a crop that will play significant role in places like Nasarawa State where food production is facing great challenges. By empirical studies, Ogo (2012) examined cassava production in Nasarawa State with particular reference to Udegede Development Area. The study however did not critically examine peasant's condition in cassava production and government intervention in cassava production in Nasarawa State. As a result, the study has a lot of gaps that need to be filled. This study was conducted to fill the gaps as it examined peasants in cassava production and used the political economy theory to examine the production process of cassava and how government intervention in cassava production can impact on the peasants. It also investigated what policy measures can be undertaken to improve the lives of the peasants who are into cassava production in Nasarawa State.

Intensifying efforts to improve the production of cassava will improve the lives of many households or peasants in Nasarawa state. In view of the above, an in-depth understanding of peasants' contribution to cassava production in rural households in the state is very imperative. And who gain and who is at the receiving end in the production process is what this study sets to analyze. Political economy will therefore help us to understand the production and distribution as well as who actually benefits in the process.

1.2 Statement of the Problem

Cassava, the starch rusty-coloured root that is staple in Nigeria, is a paradigm of the problem the import-dependent nation now faces as the plunge in oil prices is rocking the economy. The problem – and opportunity – that cassava production presents is that Nigeria, Africa's most populous nation, does not produce as much as it should, nor of the quality to make it a thriving business. Nigeria spends 635 billion naira ($3.2 billion) annually on wheat importation, (FGN, 2004). Cassava should emerge as wheat substitutes instead and even become the much-needed foreign currency earner, if Nigerian farmers and processors can improve the quality of their production.

Decades of neglect of the farming sector will have to be overcome fastly if the nation of about 170 million people is to dodge an impending food crisis due to over reliance on oil and food imports such as rice and wheat.Before the advent of crude oil in the Nigeria economy, agriculture played an important role in the economic development of Nigeria. The Nigerian State has always recognized the role of agriculture as it believes the economy cannot develop without a sound agricultural policy. To reposition the agricultural sector for a better performance, the Nigeria State has so far taken several measures intended to transform the agricultural sector whose performance has not however been considered generally satisfactory. These efforts were further reimbursed by former President Obasanjo who had strove to promote cassava production through the new cassava initiative introduced in 2002.The New Federal Government Policy of using composite flour of 10% cassava and 90% wheat for bread production in Nigeria is intended to conserve foreign exchange and encourage industrial utilization of cassava in Nigeria.

All these policy measures and programmes on food production have not brought about availability and affordability of agricultural products in Nigeria. The problem of food insecurity, poverty and hunger continued to mount rather than subsiding. Currently there is a threat to national economy by the plunge in oil prices. Again, there is the problem of food insecurity and over dependence on import goods that can be produced locally. There has been a phenomenal unemployment crisis as a result of neglect of farming. In addition, majority of the illiterate farmers do not have enough fund to buy fertilizers or pesticides and often cannot access resources to learn better cultivation methods. As a result, cassava production in sub-Saharan Africa stands at 10 tones per hectare, far below potential yields of more than 30 tones. Several policies of government to encourage food production (cassava) in Nigeria and Nasarawa State in particular have not yielded much result due to poor implementation and corruption.

Therefore, the study sought to examine the production process of cassava and what can be done to improve the socio-economic lives of the peasants in cassava production in Nasarawa State. In doing so, the study adopts the Marxian political approach to enable us have an insight into the production process of cassava, who gains and who are at the receiving end.

1.3. Objectives of the Study

The overall objective of this study is to examine the impact of cassava production on the socio-economic development of peasants in cassava production in Nasarawa State.

Other objectives of the study include the following:

i. To determine how cassava is produced in Nasarawa state.
ii. To examine the impact of cassava production on income and well-being of peasants in Nasarawa State.
iii. To examine the challenges of cassava production in Nasarawa State.
iv. To examine the impact of government policy and intervention in cassava production in the study area.

1.4 Research Questions

In order to achieve the purpose for which this research is conducted, the following research questions will be adopted to give direction to the study:

i. How is cassava produced in Nasarawa State?

ii. What is the impact of cassava production on the income and well-being of peasants in Nasarawa state?

iii. What are the challenges of cassava production in Nasarawa State?

iv. What are the impact of government policy and intervention in cassava production in the study area?

1.5 Scope of the Study

The study, Cassava Production and its Impact on the Socio-Economic development of Peasants in Nasarawa State covers the period from 2004-2014. Within this period, Nasarawa state government adopted the national cassava policy which has encouraged mass production of cassava and improves the productive base of the state. The state intervention interms of increasing access to farmers to improved cassava varieties, cost effective improved cassava processing technology, improved extension services, education, financial and credit facilities have enhanced technical efficiency in cassava production in Nasarawa State. The state did a total overhaul of its cassava policy to provide food security, increased output, income, and wellbeing of the primary producers.

The study examines how the new cassava policy aimed at: (i) Shifting cassava from being a food crop to commercial crop. The implication here is that the policy pushes the peasants to give more attention to cassava production in the state. (ii) The study has examined the production process of cassava and its effect on the peasants. (iii) Also the study investigates the challenges affecting the peasants in cassava production and advocates measures that will benefit them.

1.6 Significance of the Study

The study is significant in the following ways:

i. The significance of the study is derived from the current economic challenges facing Nigeria and by extension Nasarawa state.The need to diversify the state economy and increase its revenue base has brought this study into focus. The country has depended solely on oil as its major source of revenue for more than five decades and this has contributed to budget deficit, poor GDP, unfavourable Balance of Payment, unemployment, low per capita income and general underdevelopment. It therefore becomes necessary to diversify the nation's economy to boost agricultural production which had sustained the country before the advent of oil in the 1960s. Cassava has the potential of turning around the nation economy and improves its revenue profile generally and Nasarawa State in particular.

ii. Also of importance is the need to provide for food security and thereby reduce rural hunger and poverty in Nigeria and particularly in Nasarawa state. Food security as a concept came up only in the mid-1970s, in the international discussions on food problems at a time of global food crisis. The initial concern was on food supply problems - of assuring the availability and to some extent the price stability of basic foodstuffs at the international and national level. The World Food Conference of 1974 discussed the issues of famine, hunger and food crisis and the outcome recognized the behaviour of potentially vulnerable and affected people as a a critical aspect of food security. The conference described food security as "availability at all times of adequate world food supplies of basic foodstuffs to sustain a steady expansion of food consumption and to offset fluctuations in production and prices". FAO (1983) expanded its concept to include securing access by vulnerable people to available supplies, implying that attention should be balanced between the demand and supply side of the food security equation and ensure that all people at all times have both

physical and economic access to the basic food that they need". In 1986, the World Bank report "Poverty and Hunger" focused on the temporal dynamics of food insecurity. It introduced the widely accepted distinction between chronic food insecurity, associated with problems of continuing or structural poverty and low incomes, and transitory food insecurity, which involved periods of intensified pressure caused by natural disasters, economic collapse or conflict. This concept of food security is further elaborated in terms of "access of all people at all times to enough food for an active, healthy life. Food security incorporates food safety, nutritional balance, food composition and minor nutrient requirements for an active and healthy life. The 1996 World Food Summit observed that "Food security, at the individual, household, national, regional and global levels is achieved when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life"."Food security is a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life".

iii. Furthermore the study serves as a reference material for the policy makers, research institutions, organizations or agencies and intellectuals conducting research on similar subject mater.

1.7 Research Methodology

Research methodology involves the procedures and principles that guide the process of data collection. These include research design, population, sample size, sampling procedure, methods of data collections and data analysis.The study employs descriptive method and theoretical techniques in the evaluation and analysis of responses from the respondents in the study area.

1.7.1 Research Design

The study uses descriptive survey research as its research design. The survey research involves the selection of sample from the population for intensive study of characteristics of the population. Wimmer and Dominick (2001) posit that survey method has certain advantages over other methods. One of them is that survey is particularly versatile and

practical, especially for the administrationin that it identifies present needs. Secondly the survey constitutes a primitive type of research in that the investigation of any problem must begin with a "Survey" of its nature before it can move into the more structured and rigorous phase.

Descriptive and analytical styles were employed in the design. Fundamentally, the aim of the descriptive technique was to discover the current situation in the area under study. Also the survey study uses the instruments of in-depth interview and Focus Group Discussion (FGD). This was carefully design to collect data in accordance with specifications of the research question and in line with the research objectives. The interview question was basically designed to elicit responses from the target population through series of questions. The aim was to ascertain facts and views from the respondents in the study area.

1.7.2 Research Population

The population of the peasants in cassava production in the study area is fifty three thousand five hundred and fifty six (53,556). This population figure was provided by the Nigeria Cassava Growers Association, Nasarawa State Chapter (2014).

1.7.3 Sample Size and Technique

The sample size for this study is 399 was selected from the population of 53,556. This sample size was arrived at using Yamane (1964) statistical formula. Yamane formular is widely used in statistics and social science researches to define the minimum sample size of the population.The formular from Yamane runs, thus:

$$n = \frac{N}{1 + N(e)^2}$$

Where n=sample size

N=population

e= the level of precission

1=constant

$$n = \frac{53,556}{}$$

$1+ 53,556 (0.05)^2$

N=53,556

e=5% (0.05)

e^2=0.0025

$$n= \frac{53,556}{1+ 53,556 \times 0.0025}$$

$$n= \frac{53,556}{134}$$

n =399

1.7.4 Distribution of Sample Size

The sample distribution of the sample size of 399 was done by using simple random sampling technique. The reason for using simple random sampling technique is that every respondent has the chance of being selected.

1.7.5 Methods of Data Collection

Data are the observations or information gathered by the researcher about the subject under study to enable him or her reacts to issues raised in the research instruments. Two (2) cassava growing communities each were purposely selected from the three (3) agricultural zones of the state. The communities are: Shabu and Adudu in Southern Agricultural Zone, Ancho and Akun in Central Agricultural Zone and Ukya and Karmo in Western Agricultural Zone of Nasarawa State. The basis for the selection of the six (6) communities is because there is high concentration of peasants in cassava production in those area. The researcher collected data across the six (6) cassava producing communities through indept interview and Focus Group Discussion (FGD).

The above instruments of data collection were used to gather data on the desire areas. This method is appropriate in this study because of the homogenuity of the study group. The reason for adopting these instruments of data collection is because majority of peasants are illiterate, therefore cannot read or write.The researcher asks questions on the personal attributes of peasants in cassava production and production processes of cassava. Test and re-test methods have been used to test the validity and reliability of the research instruments. This has been done with the aid of research assistants who have helped the researcher to carry out the work effectively.

Secondary sources like text books, journals, internet, and other printed materials have been used to elicit information that are relevant to the study.

1.7.6 Data Analysis

The data collected for this study was analyzed using descriptive statistical methods such as frequency and percentages. The analysis is presented with respect to the research questions formulated and used in the study. The responses of the respondents to each item were analyzed. The items were analyzed using frequency tables, percentages. In-depth interview and Focus Group Discussion were analyzed using content analysis.

And out of the 399 sampled population, 377 were accessible. Therefore the analyses were based on the number of respondents reached for the study. Qualitative analysis of participants' responses in the Focus Group Discussion (FGD) and in-depth interview has been carried out. The qualitative material from the interview questions and Focus Group Discussion (FGD) has enhanced the data and provided valuable depth to the analysis. Essential quotations and expressions by the respondents were reported verbatim to enrich the study.

1.8 Limitation to the Methodology

The study is limited to the impact of cassava production on the socio-economic development of peasants in Nasarawa state between 2004 -2014. Within this period Nasarawa State government implemented fully the National Cassava Policy by providing the farmers with improved cassava varieties, cost effective cassava processing technology, financial and credit facilities.The study made a thorough assessment of cassava production and state interventions in cassava production in Nasarawa State.

To achieve the purpose of the study, two (2) cassava producing communities were purposely selected from the (3) Agricultural zones of the state. They are: Shabu and Adudu in Nasarawa South Agricultural Zone (which consist of Awe, Doma, Keana, Lafia and Obi), Ancho and Akun in Nasarawa Central Agricultural Zone (Akwanga, Kokona, Nassarawa Eggon and Wamba) and Ukya and Karmo in Nasarawa West Agricultural Zone (Keffi, Karu, Nasarawa and Toto). Data was analysed using frequencies and percentages from the research questions in accordance with research objectives.

In conducting this study, the researcher faces serious difficulties to collect data from all the communities in Nasarawa State due to time constraints and financial disposition. The researcher raised money from friends, colleagues and family members to carry out the project.

Also, majority of the peasants in cassava production are not educated, the researcher employed the services of research assistants, Hon. Abubakar Yusuf from Toto, Mr. Joseph Agba from Adudu and Mr. Sule Akun from Akun who voluntarily interpreted and translated the responses to the researcher.

The researcher encounters a lot of difficulties to get enough information from the officials of the Nasarawa Agricultural Development Programme and Nasarawa State Ministry of Agriculture because information is considered official.

The logistics of getting as many peasants in cassava production as can constitute a fairly representative sample for the whole state.

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Clarification of Concepts

2.1.1 Peasants

Peasants are independent producers cultivating on small pieces of land using simple tools like hoes, cutlasses, knives among others to produce agricultural products. Teodor (1984) describes peasants as those whose ultimate security and subsistence lies in the labour of family members on the land but who are involved, through rights and obligations, in a wider economic system which includes the participation of non-peasants. Peasantry consists of small agricultural producers who, with the help of simple equipment and the labour of their families, produce mainly for their own consumption and for the fulfillment of obligations of the holders of political and economic power (Redfield, 1956).

The small peasants are the major producers of food, particularly cassava in Nigeria. And the Nigerian state exercises control over food production through policy formulation and implementation. The bureaucrats use the state to determine what to produce, to whom to produce and how the products of labour are appropriated. Sometime the bureaucrats initiate policy on general food production such as Green Revolution, Operation Feed the Nation or some time they initiate policy on particular products like the National Cassava Policy to regulate the production processes of food.

2.1.2 Development

Development is defined differently by different people. Majority of scholars and policy makers held that development is about creating an enabling environment in which people can have long, healthy, and prosperous life. Rodney (1972) posits that development in human society is a many-sided process. At the level of individual it implies increase in skills and capacity, greater freedom, creativity, self-discipline, responsibility and material wellbeings. Man found it convenient and necessary to come together in groups to hunt and for the sake of survival. The relations that develop within any given social group are crucial to the understanding of the society as a whole. Freedom, responsibilitiy, skill etc have real meaning only in terms of the relations of man in the society.

Rodney (1972) further posited that men are not only beings wich operate in groups, but the human species embarked upon a unique line of development because men had the capacity to make and use tools…the tools with wich men work and the manner in which they organize their labour are both important indices of social development. This capacity for dealing with the environment is dependent to the extent in which they understand the laws of nature (science), to the extent to which they put that understanding into practice by devising tools (technology) and on the manner in which work is organized. The progress from crude stone to tools to the use of metals, the changeover from hunting and gathering wild fruit to the domestication of animals and growing of food crops, the improvement in the organization of work from being an individualistic activity towards being an activity which assumes a social character through the participation of many. All these indicated interrelationship between men and environment in their struggle to earn a living and the historical transformation from one mode of production to another.

In terms of development, developed economies have certain characteristics which constract with underdeveloped ones. The developed countries are all industrialized, the greater part of their working population is engaged in industry rather than agriculture, most of the wealth comes out of mine, and factories etc. They have a high output of labour per man in industry because of their advanced technology and skills (Rodney, 1972).

2.2 Agriculture in Nigeria

The discovery of agriculture by man about 10,000 years ago had far-reaching and revolutionary effects on human history and civilization. The acquisition of the knowledge and skills of food production made it possible for man to abandon his peripatetic life for a settled way of life. New and more efficient farming implements such as chisels, polished stone, axes, hoes and sickles brought about increased food production which concomitantly led to increase in population. Growth in population and surplus food production facilitated the specialization of people in the production and provision of many special goods and services to the community (Ajaegbo. 2001).

At the first stage, people used crude implements to appropriate land to produce food for family consumption. In the process of striving to make a living people learn to develop more sophisticated implements such as axe, bows and arrows, scrapers, spears among others to hunt and farm. As instruments of labour developed, a natural division of labour emerged

within the clan between men and women, adults, children and old people. Men specialized in hunting and women in gathering food, which somewhat increased labour productivity. At the first stage of clan system, the head of the clan was the woman, who collected food and dealt with domestic matters. This was the matriarchal clan. Later when livestock-breading and farming were taken over extensively by man, matriarchy was replaced by the patriarchy where a man headed the clan (Jones, 2002).

As society developed, there was division of labour, one part specialized in farming while the other specialized in livestock. This made labour more productive. People engaged in joint labour to produce or appropriate land for agriculture and stock-raising. This led to the creation of surplus and laid the foundations for exchange of products of labour. With this development, the new productive forces could no longer accommodate the existing relations of production. Individual labour suppercedes joint labour, private ownership of the means of production, and property inequality between clans and people within the same clan emerged. The rich people exploit the poor to enrich themselves. As property inequality increased, the rich began to enslave not only the captives but also members of their fellow tribesmen who had become impoverished or were in debt. Thus, arose the first class division of society into slave-owners and slaves. Exploitation of man by man began. Human history became the history of struggle between classes. The objective basis on which classes emerged was the growth of labour productivity which reached a level of which a surplus products – that is an excess over the minimum of the vital means of subsistence was secured (Jones,2002). Surplus was created through slave production. The rich slave owners have in their possession hundreds and thousands of slaves which they used as tools for production. The products of labour of slaves are appropriated by the slave owners.

The surplus products created during the surplus period was used for exchange value. What was produced had to be exchanged in order to satisfy material needs of the society. Since what was produced in exchanged for something in return, production for market became the main target of production. In the first place articles were exchanged for articles and cowries were used for goods and services. The colonialist introduced money as a medium of exchange; money penetrated all aspects of production process. The monetization of a precapitalist economy is necessary for its integration into a capitalist one. The essence of the capitalist mode of production was that it penetrated and took over the production process. To say that capital has taken over production means that production is geared to the output of

commodities or what is the same thing that production occurs for the purpose of exchange (Ake, 1981).

Ake went further to state that the process of monetization went hand in hand with the spread of capitalist relations of production, particularly because it led to the proleterianization of the African peasant as well as some African entrepreneurs. It also went hand in hand with the development of capitalist institutions such as the money market. The monetary system not only helped to create a capitalist economy, but also a capitalist economy structurally dependent on foreign economies. Thus, the colonial currency was tied to that of the colonizing power, and the money supply was determined mainly by the social and economic force in the metropole, particularly the demand for the colony's exports. The dependence of the colony's prosperity on the export demand of the metropole reinforced not only the export orientation of the colony, so that it became complementary to the metropolitan economy, but it also compelled its specialization on primary products, a specialization which further reinforced its organic unity with the metropolitan economy.

Colonialism promoted the production of primary products to satisfy the industrial and food needs of the metropole. The pressure in favour of primary production in the colonial economy only reinforced the existing division of labour between the colony and the metropole, as well as reinforcing the structural dependence of the colony. Also the investment in primary production did very little to generate external economies. Since there was very little processing, the stimulation of production brought by foreign investment did not contribute much to the improvement of knowledge or the improvement of techniques, in short, the development of productive forces. The expansion in the production of primary commodities did not involve radically new techniques, but largely the methods already in use, with perhaps a little more efficiency, in sum, because foreign investment increased primary production without significantly raising incomes, improving the development of productive forces or even capital accumulation, it did not hold much hope of the colony breaking away from its role on the division of labour established in the early periods of colonialism between the colony and the metropole (Ake, 1981).

Colonialism integrated Africa to the metropolitan economies through trade and investment. This integration brought about persistent domination, subjugation, exploitation and determination of polices of Africa states from abroad. Several socio-economic policies such as liberation, privatization, commercialization; agricultural policies among others were packaged and sent to African states by the western capitalist countries. Rodney (1973) argued

that colonialism had negative impact on Africa's development as Africa lost the power to defend its interests, and control its internal matters. In Nigeria for instance, our agricultural policies such as Operation Feed the Nation, Green Revolution, Cassava Multiplication Project, National Cassava Initiative among others promote capitalization of Nigerian agriculture. This development has negative effect on Nigeria's food production.

Huge amount of investment has been made by international monopolies and imperialists states to produce raw materials from the neo-colonies for industrial revolution in Europe and food demand of the metropole. The new colonies serve as markets for the manufacturing of products from Europe. The relationship that is created between the countries of the advanced capitalist nations of the world and the underdeveloped countries of Asia, Latin-America and Africa is lopsided. The underdeveloped countries are permanently put under perpetual control because the western capitalist countries have competitive advantages over them.

Imperialism promotes dependency and underdeveloped in Africa since the continent can not survive without depending on colonial masters. Large amount of foreign capital in Africa is provided by the multinational corporations. The rate and direction of investment are decided by foreign firms and capitals. The native bourgeoisie play the role of intermediaries to maintain the status quo in favour of industrial metropolists.

Different policy issues on agricultural reforms generally in Africa and Nigeria in particularly are dictated and directed by industrial metropolists through international monopoly firms and with the aid of petty bourgeoisie who are suffering from poverty of ideas resulting to poor socio-economic and agricultural policies, the country lacks the wisdom to stand against all forms of perpectual intimidation and domination by the foreign forces and their allies.

With African countries generally and Nigeria in particular shaping their domestic economic policies including agricultural policies in line with the global economic agreements and institutions, (and the ability of government to make effective policy is narrowed) the new wave of integration of African economies including Nigeria into the world's capitalist system through globalization, trade and investment has reinforced the exploitation of the country and places the nation at continued dictates of the developed economies of the world.

2.3 Peasants and Food Production in Nigeria

Peasants are part of awkward class depended solely on the use of crude implements like hoes and cutlasses, who engage in fragmented landholding and produce food mainly for consumption (Ploeg, 2003). They engage in simple production, that is what is produced is for use value. With the emergence of joint labour in the production process, peasants have began to produce more than they can consume, thus, surplus value has emerged and exchange relations have became the dominant feature of production.

Peasants have over the years engaged in joint labour to produce or appropriate land for food production and stock-raising. But they have not engaged in production process as equal partners because they are categorized into different classes. Few of them produce as owners of the means of production while majority of them produce as non-owners of the means of production. This kind of production structure brought many men into dependence upon the few (Jones, 2002). This categorization is used to describe producers in relations to domination and subordination in the production process and the way in which the products of labour are appropriated. We have peasants that have been proleterianized as source of chief labour; some as share croppers. We also have rich peasants or capitalist farmers who exploit the labour of the poor peasants. There are also middle peasantry who serves as the intermediary between the rich and poor peasants in the production process.

The rich peasants have direct access to the state bureaucracy and merchant capitals through which they exert great economic and political influence over their respective communities. Also the state imposes its claims on the surpluses of peasant production through all kinds of legislative measures, strategies and policies.

The capitalists use state power to regulate the condition of the peasants' production by making laws about who might produce what, imposing development programmes which put the peasant in the position of using fertilizers and different techniques for tools. The process of compelling the use of these inputs and techniques is ostensively to help the peasants, but aid the integration of the peasants into exploitative commodity production relations; imposing laws which standardized products and production relations (Ake, 1981).

In peasant agriculture, it is believed that land and labour are the most important factors of production. This is highly contradictory because the instrument of labour is essentially important just like land and labour. The interrelationship among these three elements of

production process determines the level of growth and development of agricultural production in any peripheral capitalist formation like Nigeria.

For us to make any reasonable analysis of the structure or character of the organization of production process in peasant agriculture, we need to know the nature of production relations that have occurred among the peasants in the production process and how these relations of production affect agricultural productivity. The nature of production relations in Nigerian agriculture is reflected in the form assumed by the structure of land-holding, the level of development and distribution of the instruments of labour and the way in which the products of labour are appropriated (Yahaya, 1986).

It is obvious that the agrarian sphere in Nigeria is composed of different isolated small scale producers, cultivating on small and fragmented holdings using a backward form of technology but the large and medium scale producers use modern technology like tractor, plough, motorized peelers among others in the production process. The products obtained from this process of production are generally appropriated in exchange with middlemen, organization of merchants and institutions set up by the state such as marketing and produce board. Institutional reforms and strategies in Nigeria could not explain the possibility of achieving a degree of success in food and agricultural production in the country. This is because these institutions and foundations were created by the state to regulate the condition and direction of the peasants' production to satisfy the interests of the colonial masters and their economy.

Agricultural policies during the colonial era in Nigeria neglected the production of food, but emphasized the development of capitalist commodity production (Nzimiro, 1977). Under colonialism the peasantry was incorporated into the world capitalist system of surplus appropriation and into hierarchical system of administration which extended down to rural areas. The incorporation restructured economic relations between the developed and developing countries, labour migration, the growth of towns and increase in the spread of commodity production in Nigeria.

The neo-colonial state adopted different agricultural policies and programmes similar to those of the colonizing powers. Agricultural policies and strategies in post-colonial Nigeria have been introduced under the auspicies of the cartel of international institutions such as World Bank and other foreign agencies to offer solutions to the agrarian problems in the

country. A study into the role of the international cartels particularly the World Bank in agricultural development in the Third World Countries by Cheryl Prayer identified two basic types of agricultural projects: the improvement approach and the transformational approach. The rationale behind the transformational approach is that the conservative peasants must be uprooted from their customary institutions and placed in a transformed setting in order to revolutionize their productive practices. The target is to control the means of production, land and labour.

A good example of transformational approach is the agricultural settlement projects in which land is acquired through the government and peasants are moved out of the land to be developed. Experiences have shown that there is persistent conflict between customary rights of usage particularly when settlers are moved to settle in an area that is formally occupied by other set of people. The issue of labour control and the new settlers are placed directly under the supervision of the project authority. The peasants are told what to produce, when and what time to harvest and their wages are relatively low to meet up with the cost of production.

The second approach is the improvement approach. Here the society and the land tenure system are left untouched where as the peasants persuaded by rural development agents to adopt the modern inputs and new crops that will enable them to produce a large surplus for the market. This is reflected in the integrated rural development project which the World Bank finance only physical structures like roads, water supply and electricity among others to boost food production.

Another agricultural package adopted as an answer to the agrarian problem and mass poverty in the Third World Countries and particularly in Nigeria is Green Revolution. Green Revolution involved the application of modern technology, insecticides, chemical, fertilizer and high yielding varieties or seedlings among others to revolutionize agricultural production. Available records show that the machines imported were obsolete ones, the socio-economic and political environment for their application were not there and the so call technology was in the hand of the bureaucrats, capitalist farmers and big peasants who because of their influence in the state used Green Revolution as a tool for exploitation, oppression and appropriation of the surpluses of the poor peasants.

The agrarian bourgeoisie or capitalists saw Green Revolution as an opportunity to enter into alliance with international finance and capital to expand its production base and capital

accumulation. Beckman (1985) in his analysis of agricultural projects in the Northern part of Nigeria argues that the project had led to increased participation by international capital through input in agriculture and had given rise to a new breed of gentlemen farmers made up of retired army generals and civil servants. Also that it had led to increased capitalist relation of production and the differentiation of the peasantry into the rural proletariat and bourgeoisie respectively.

These agrarian approaches were highly contradictory because they led to the entrenchment of capitalist agriculture in developing countries like Nigeria. The real intention of the projects was not to eradicate poverty or to improve the lives of peasantry but to appropriate land for production to serve the material interests of the capitalist western nations and their allies.

2.4 Cassava Production in Nigeria

In Nigeria, cassava is grown in all the ecological zones (Odoemenem, 2011). The production of cassava is concentrated in the hands of numerous small-holder producers located primarily in the south and the central regions of Nigeria. A significant population of cassava growers in Nigeria has made the transition from traditional production systems to the use of high-yielding varieties and mechanization of processing activities (Nweke, 2002). According to Barry (1993), Nigeria and Zaire have both large and small scale farms on which cassava is grown by full-time and part-time farmers. The adaptation of cassava to the food and farming systems and multiplicity of uses makes it indispensable to food security (Adeniji, 2007).

Food and Agricultural Organization (2004) provides statistics of cassava production in three countries, Nigeria, Cameroun and Togo, for the period 1990 to 2003. The data showed that cassava production witnessed increases in the three countries with Nigeria being in the lead. This statistical estimate of cassava production provided by Food and Agricultural Organization is shown in table below:

Table 1: Levels of Cassava Production from 1990-2003 (tons)

Year	Nigeria	Cameroon	Togo
1990	19,043,008	1,587,872	592,867
1991	26,004,000	1,622,000	510,528
1992	29,184,000	1,636,000	452,093
1993	30,128,000	1,684,000	389,448
1994	31,005,000	1,715,000	531,526
1995	31,404,000	1,780,000	607,222
1996	32,050,000	1,848,000	548,316
1997	32,695,000	1,918,000	595,792
1998	32,698,000	1,965,950	579,381
1999	32,070,000	1,889,191	693,998
2000	32,810,000	191,830	7,000,699
2001	32,586,000	1,947,266	651,530
2002	34,476,000	2,200,000	729,708
2003	33,379,000	2,619,142	724,000

Source: FAO (2004)

The Food and Agricultural Organization of the United Nations in Rome estimated 2002 cassava production in Nigeria to be approximately 34 million tons (FAO, 2004). The trend for cassava production reported by the Central Bank of Nigeria mirrored the FAO data until 1996 and thereafter, rose to the highest estimate of 37 million tons (FMANR, 1997; Central Bank of Nigeria, 2000). The third series provided by the PCU had the most conservative estimate of production at 28 million tons in 2000 based on the state level data provided by the ADP offices in each state (PCU, 2003). The comparison of the output of various crops in Nigeria indicate that cassava production ranks first, followed by yam production at 27 million tons, millet at 6 million tons and rice at 5 million tons (FAO, 2004).

The expansion of cassava production in Nigeria has been relatively stable since 1980 with an additional push between 1988 to 1992 due to the release of improved IITA varieties. By zone, North Central zone produced over 7 million tons of cassava a year between 1999 to 2002. South-South produced over 6 million tons a year while the South West and South East produce just less than 6 million tons a year. The North West and North East are small by comparison at 2 and 0.14 million tons respectively. Benue, Kogi and Nasarawa states in the North Central Zone are the largest producers of cassava (IITA, 2007).

The table below captures the rates of cassava production in different geo-political zones of Nigeria as provided by the project coordinating unit.

Table 2: Cassava production by Zone (2002-2004)

Zone	2002	2003	2004
South-West	4,993,380	5,663,614	5,883,805
South-South	6,268,114	6,533,944	6,321,674
South-East	5,384,130	5,542,412	5,846,310
North-West	2,435,211	2,395,543	2,340,000
North-Central	7,116,920	7,243,970	7,405,640
Total	26,363,099	27,521,016	27,938,049

Source: Project Coordinating Unit (2005)

From the above table, it is evident that the North Central zone appears to be leading in cassava production in Nigeria between 2002-2004. Other subsequent reports by the Project Coordinating Unit, 2007 made similar projections.

Nigeria grows more cassava than any other country in the world. Its production is currently put about 34 million metric tons a year. Total area harvested of the crop in 2003 following the presidential initiative was 32 million hectares with an average yield of about 110 per hectare (Thisday, 2005). The production of cassava is concentrated in the hands of numerous small holders, farmers located mostly in the south and central state of Nigeria. The market of cassava can be divided into two categories: the traditional food oriented market and the new emerging market for industrially processed cassava. The vast majority of the cassava grown in Nigeria is for now processed and sold through traditional markets channels which are fairly well known. It is the industrial market that is still in the making.

Expansion of cassava production has been relatively steady since 2000 with an additional push between the years 2000 and 2002 owing to the release of improved IITA varieties. In Nasarawa state for instance, government had in 2003 imported high yielding varieties from Brazil to boost the production of cassava in the state. The varieties were brought by the first executive Governor of Nasarawa State, Abdullahi Adamu, for diffusion. The varieties were immediately sent to the ministry of Agriculture, which later prepared nursery site at Awe, Arikya, Karmo, Nasarawa Eggon and Lafia. The idea here was to later diffuse them to farmers. However, not much is heard about the much talked about highly

yielding varieties in Nasarawa State.The table below captures the rate of cassava production between 2005- 2007.

Table 3: Cassava production by zone (2005-2007)

Zone	2002	2003	2004
South-west	6,283,142	6,458,911	6,755,316
South-south	6,821,674	7,139,452	7,483,139
South-east	5,987,220	6,321,739	6,641,855
North-west	2,410,025	2,652,944	2,653,812
North-central	9,335,816	9,848,712	984,925
Total			

Source: PCU (2008)

On a per capital basis, North Central under which Nasarawa State falls, records the highest at (.72) tones per person in 2004, and 2007, followed by south-east (.56) south-south (.47), south-west (.34), North-west (.10) and North-east (0.1), national per capita production of cassava is 32 tones per person.

Benue, Kogi and Nasarawa States in the North central zone are the largest producers of cassava (IITA, 2007). Cross-Rivers, Akwa-Ibom, Rivers and Delta dominate State cassava production in the south-south; Ogun, Ondo and Oyo dominate south-west' and Enugu and Imo dominate production in south-east. Kaduna alone in the North-west is comparable in output to many of the southern regions at almost 2 million tones a year with little currently produced in the north-east. Nigeria's production according to FAO (2007) has increased from about 37 million tones in 2004 to about 60 millions tones in 2007. This is to be followed by 150 million tones by the year 2020.

The National Cassava Policy was initiated in the year 2002 and huge production was recorded in Nigeria. According to Adetunji (2007), the cassava programme has increased the demand for cassava flour by additional 380,000 metric tones, and demand of about 374 small and medium enterprises (SMEs) for flour mills. According to her, government has shown commitment to the programme through increased agricultural finance, allocation and loan facilities worth N50.5 billion earmarked by both government and the flour milling association in 2006 for farmers, processors, fabricators and input suppliers.

2.5 Resource Productivity in Cassava Production

Resouce as related to food production refers to land, labour, capital, management and other factors that aid production. Resource productivity entails the combination of different factors such as land, labour, capital and management factor in the production process of food. Resource productivity as related to agriculture is concerned with how land, capital, water and management resources among others are employed in various agricultural activities to produce products of interest (Upton, 1996). The kind and quantity of resources used in primary production activities in tropical Africa's rural economies are characterized by old techniques and crudity or simplicity of forms that tend to give a rise to low output (Olayide, 1980). In addition, resource utilization all over the world may said to be faced with the problems of under capacity in less developed countries and over capacity in the developed countries (Ogunfowora, 1982). Thus, resource productivity looks into how land, labour, capital and management resources are effectively and efficiently utilized to meet the food requirement of the people.

Land Resources

Land is a permanent or fixed resource upon which food production is organized. Key (1981) views land as a permanent production resources whose productivity can be improved through land clearing, drainage, irrigation, and introduction of new and improved plant species. Many village heads still allocate land to immigrants settling in the community and resident families. He further argues that the so-called "surplus land" is actually cultivated land which has being left to fallow during the period of the various survey. Also, he provides an alteration in the main land ratio which he attributes to population growth, increased population densities and massive internal migration which led to shorter duration of fallow and limited availability of land. Other factors which influence farm plot sizes are location, techniques of cultivation and labour resources at the disposal of the farmers illustrating with Nigeria's total land area of 92.457 hectres (Olayide, 1980).

The total area devoted to cassava production in 2003 following the presidential initiative was thirty two (32) million hectres with an average yield of about one hundred and ten tones per hectres (Thisday Newspaper, 2005). In Nasarawa state the land area devoted to cassava production is one hundred and seventy five thousand, eight hundred and eighty (175,880) hectres (NADP, 2010).

Labour Resources

Labour is the physical and mental ability of man in the production process. The labour requirement of farm production for clearing, planting, ploughing (especially in the developing countries) weeding, spraying, harvesting etc are very considerable. Farm management studies have shown that on peasant farming communities, human labour requirement in the production process constitute between 50 and 65% of all farm operations (Samson, 1980). In many parts of the tropics the area of land cultivated is decided by the amount of work the family can do. If the farmers can get more labour, he can cultivate more land. Cassava farming is thought to require less labour per unit of output than most other major staples. Any expansion of production would lead to increase in labour productivity (Technical Advisory Committee, 1997).

Capital Resources

Ogunfowowa (1982) describes capital as man- made assets, which are used up in the process of producing other goods. Capitals are goods employed but not necessarily used up in the course of production, together with money or credit which gives power to buy such goods (Olayide, 1980). Thus, capital inputs for business may be described as the sum total of money available for investment which could be used to hire labour, purchase or rent land and pay the necessary services and the money already invested in the purchase of real assets needed for production (Ogo, 2011). Adeniyi, (1985) classifies capital into two categories, fixed capital which includes farm tools, equipment, storage, facilities and circulating capital which includes cash, fertilizer, seeds, insecticides and herbicides.

The amount of capital in agricultural sector is to some extent, a major determinant of the size of the operating units because of farmers with enough working capital are usually better in employing other factors of production hence enlarging their holdings than relatively poor farmers (Adeniyi, 1985).

Management Resources

The farmer's skill and knowledge as a manager may be considered another productive resource (Upton, 1969). Farmers make wise management decisions on when and how to plant crops, types of labour, crop mixtures and fertilizer application. The types of management decisions taken are determined by the size of farms.

In tropical Africa, three types of farms exist. The first type is small scale peasant farms while the second is commercialized medium scale farms and the third is large scale cooperative farms. Since the class of small scale peasant farmers constitute the bulk of producers supplying about 95% of farm products in the tropical Africa, there are management input problems which need to be carefully examined and solved or minimized in order to ensure increased productivity, enhance net farm income and stimulate structural changes conducive to optimal farm enterprise combination and increase agricultural production (Olayide, 1980).

2.6 The Utility and Demand Estimates of Cassava in Nigeria

Cassava production is an activity mostly carried out in the rural areas and purchases of cassava starts from farm. Sometimes cassava is bought when the tubers are still in the ground and the buyers do the harvesting. This practice is prevalent in Nigeria with women processing the cassava into gari and other cassava products like 'akpu' and 'alebo'. Also farmers and intinerant cassava merchants transport cassava and cassava products to the nearest local and district markets where they are sold to prospective consumers. Cassava and cassava products are demanded and consumed both locally and internationally. Apart from being used in variety of paste products such as spaghetti and macaroni, cassava flour has been identified to be useful in the manufacture of cassava beer in the brewery industry (Olomu, 1995). In another development Terry (1983) posits that since the rapid escalation of energy cost, especially liquid fuel prices, considerable attention has been given cassava as a source of ethanol with particular example in Brazil, where enormous effort had been put into production of alcohol using sugarcane and cassava as biological resources. FAO (2004) provides estimate of foreseeable future of cassava demand estimate in Nigeria and this is provided in a table below:

Table 4: Cassava Demand estimates by 2007 (tons)

Product	Export	Import	Import
Food	5,700,000	1,825,000	7,525,000

Starch	1,770,000	3,200,000	4,970,000
Livestock feed	15,622,000	75,621,248	91,243,248
Ethanol	900,000	2,700,000	3,600,000
Total	23,992,000	83,346,248	107,338,248

Source: FAO (2004)

Cassava products entered international trades in different forms such as chips, broken dried roots, meal, and flour and tapioca starch. Dried cassava roots and meal are used as raw materials for compounding animal feeds (Odoemenem, 2011). Cassava roots and products such as garri, cassava flour, alebo and akpu are sold or demanded in both rural and urban domestic markets in Nigeria. Knipscheer, 2003 provides the conservative estimates of cassava production Nigeria as contained in the table blow.

Table 5: Conservative Estimates of Cassava Future Demands (tons) in Nigeria

Sector	Current alternative product use	Substitution (%)	Equivalent in fresh cassava root
Food	1,180,000	20	1,000,000
Starch	67,100	100	350,000
Livestock	1,200,000	20	1,000,000
Ethanol	20,900	100	2,000,000
Total	2,468,000		4,350,000

Source: Knipscheer, (2003)

Cassava remains the major root and tuber crop that is produced in Nigeria. Its production has become the main agricultural enterprise providing household income and an important enterprise for poverty alleviation. The crop accounts for over 50% of food intake in Nigeria and provides substantial percentage of food energy in the daily diet (Kalu, 2003).

Cassava is one crop that can be transformed into different products. It can be used as food for human and feeds for animal consumption; it can be processed into dextrin, adhensives and hydrolysates in the pharmaceutical industries and it can be used as ethanol in the production of bio-fuel.

Cassava products are used in various forms for human consumption, livestock feed, and manufacturing of industrial products (Ene,1992). Cassava contains about 92.2 percent carbohydrates and 3.2 percent protein in its dry matter, and is said to have high energy content. International Institute of Tropical Agriculture (1990) posits that cassava products are also important feed stuff for livestock feed formulation. For example, cassava has a capacity

of substituting up to 44 percent maize in pig feed without any reduction in the performance of pigs.

Cassava starch, cassava flour, cassava juice and fermented cassava are now used in industries (Terry, 1983, Ene, 1992, Olomu, 1995). Cassava starch has also been industrially modified to provide products with physical and chemical properties for specific applications, including the preparation of jelly, thickening agents, gravies, custard powders, baby food glucose and confectioneries (Ene, 1992). Further more, Terry (1983) observe that since the rapid escalation of energy cost, especially liquid fuel prices, considerable attention has been given to cassava as a source of ethanol with particular example in Brazil, where enormous effort had been put into produciion of alcohol using sugarcane and cassava as biological resources.

In Nigeria, cassava can be processed into different forms for human consumption. IITA (2002) identifies and highlights the characteristics of the common forms of cassava products available in Nigeria. These include ‘garri’, ‘fufu’, cassava chips, cassava flour, starch, farina, tapioca, macaroni, cassava bread and pudding. The Federal Ministry of Health (2004) provides that the frequency of consumption of cassava products is more in some states in Nigeria and this is shown in the table below:

Table 6: Frequency of Cassava Consumption in Nigeria

State	1-2 times (%)	3-4 times (%)	More than 4 times (%)
Osun	29	36	33
AkwaIbom	29	39	33
Bayelsa	21	15	51
Edo	21	25	53
Imo	24	21	43
Kaduna	74	18	4
Kano	57	37	4
Kebbi	84	15	0
Kwara	27	38	35
Borno	65	28	4
Taraba	37	25	33
Zamfara	43	27	30

Source: Federal Ministry of health, Nigeria (2004)

In Nigeria, the consumption pattern of cassava products is gradually changing from being a poor man food to a necessity. Virtually all classes of people consume cassava products such as garri, akpu, chips, cassava flour. Thus, kormawa, (2003) provides the consumption pattern of cassava products in all the six geographical regions of Nigeria as contain in the table below.

Table 7: Consumption Pattern of Cassava Products in Nigeria

Zone	Order of preference
South South	Garri, Akpu/Fufu
South East	Garri, Fufu, Akpu
North Central	Garri, Fufu, Starch
North East	Garri, Fufu, Abacha

Source: Kormawa and Akoroda (2003)

Apart from industrial and household usage or utilization of cassava in Nigeria, the crop can be used as livestock feeds. Okeke (1998) provides that in compounding feed for pigs, broilers, pullets and layers, cassava meal plays a significant role. Eaglesto*ner,* (1992) argues that the whole cassava plant, boiled root, cassava root meal, chips and pellets could be used in compounding livestock feed. The roots could be dried, ground and fed to ruminants and it could be used as substitutes for maize in poultry feed. The government of Nigeria considers a

transition from the present status of usage to the level of industrial raw material and livestock feed as a development goal that can spur research and policy initiatives in cassava improvement, production and processing (Echebiri, 2008).

2.7. Social Classes and Cassava Production

Marx (1850) describes class as all those people who share a common relationship to the means of economic production. That class emerges when the relations of production involve a differentiated division of labour, which allows for the accumulation of surplus production that can be appropriated by a minority of grouping, which thus stands in an exploitative relationship to the mass of producers.

The two approaches prominent among the sociologists are Weberian and Marxist conceptions of class. Thus, neo-Marxists and new Weberians came into force, driving their roots from Marx and Weberian perspectives on social class. Third perspective on class emanates from the American sociologist and social anthropologist Lloyd Warner who relates class with certain social division. To the Weberian approach, social class is mainly economic relating not to property alone but also to market situation which includes reward for the sale of one's physical and mental labour.

To Marxist approach, social class is determined in terms of relationship to the ownership of the means of production, relationships in terms of domination and exploitation of the actors that are involved in the social organization within which production takes place. According to Marxian perspective, in all stratified societies there are two main social groups: the haves and the have-nots; the rich and the poor; the ruling class and the subordinate class. Those who own and control the means of production such as traditional rulers, bureaucrats and elites are the dominant class. Those who own their labour power such as serfs and peasants are the subordinate class. The ruling class initiates agricultural policy particularly cassava policy to regulate the condition of peasants production and exploits the labour and products of the peasants. The poor peasants are compelled by way of legislation and policy initiative to produce cassava to be exported to other countries of the world particularly china to satisfy the interest of the ruling class. Thus, the relationship between the two classes is characterized by domination, subordination and exploitation. To Marx, class is not determined by the occupations or income but by the position an individual occupies and the function he performs in the process of production. He views class as a social group where

members share the same relationships to the forces of production. The objective basis on which classes emerged was the growth of labour productivity which reached a level of which a surplus product- that is an excess over the minimum of the vital means of subsistence was secured (Jones, 2002).

Marx associates his position with the fact that the economic base of society influences the general character of all other aspects of culture and social structure such as law, religion, education and government. The dominant class such as the elites, bureaucrats and urban-based businessmen are able to control all these institutions and to ensure that they protect their own interests. The law on 10% cassava flour in bread production is provided to protect the rich but not the poor peasants. The bureaucrats educate or teach the virtues of existing system, not its vices. The major function of education in all societies is to facilitate domination and exploitation (Ake, 1981). Government upholds the status quo rather than undermining it.

According to Marx, classes did not exist during the period of primitive communal mode of production which was dominated by co-operation and joint labour. Here production was for use value, but classes emerged when the productive capacity of the society expanded beyond the use value. In slave mode of production slave-owners and the rich owned and exploited the slaves; in feudal mode of production feudal lords or aristocratic land-owners exploit majority of the peasants in the form of land rent. Meanwhile in the capitalist mode of production, the capitalists or bourgeois appropriate nature and surplus labour at the detriment of the proleteriate. The subject class represented by serfs and peasants supplies the dominant class with labour needed for cassava production. The ruling class represented by traditional rulers, and the bourgeois exploited the labour power of subject class for surplus appropriation.

Marx argues further that the power of the ruling class emanated from its ownership and control of the forces of production. The existing relations of production between individuals must necessarily express themselves also as political and legal relations. The bourgeois and other influential groups took over the machinery of the state to suppress, subjugate and exploit the subject class, thereby rendering them poor. The peti-bourgeois and comprador bourgeois connived with the international firms and capitals to exploit the poor peasants in cassava production to satisfy their selfish interest. The peasants produce surplus goods but do not benefit from the surplus rather the dominant class enjoyed all the surpluses created. As a

result of this, exploitation and manipulation of the peasants, the society started noticing serious threats to food security, poverty and conflict between the classes.

In the Capitalist society, commodity production became the dominant factor in the production process. What was produced wass destined for exchange rather than for own use. Since what is produced is exchanged for something in return, production for market became the main target of production. Price and profit determined the direction of production, distribution and exchange of the material wealth of the society. The dominant class such as the bureaucrates and elites control the means of production, distribution and exchange of goods and services. They exploited the proletariat or producers (working class) in the production process and appropriated the surpluses of labour for their own selfish use.

It is obvious even today that in a capitalist economy, a small minority owns the means of production. Producers do not own or have control over the products they produce. Like their products, they are reduced to the level of a commodity. A monetary value is placed on their labour and the costs of labour are necessary in the same way as the cost of machinery and raw materials. Like the commodities they manufactured, workers (peasants) are at the mercy of market forces, that is, the law of supply and demand (Geoge, 2008).

2.8 Review of Empirical Literature

To examine the impact of cassava production on the peasants in Nasarawa state, the study has reviewed existing literature and presented them in the following sequence: name, date and title of the work.

Umor C.A, Iboh, A.O. and Fubara R.S (2004) "Commercial Cassava Optimization Challenges and Strategies in Nigeria.This work critically examine issues relating to Nigeria's cassava potentials for local and export consumption, with a view to advance the course of standardization and optimization. With escalating food prices in recent times, the high need to accelerate cassava production to meet local and export need cannot be overemphasized.

Asogwa, B.C. Umeh, T.C. and Ater, P.I, in their study "Technical Efficiency Analysis of Nigeria farmers: A Guide to Food Security Policy" the study adopted regression model to establish a relationship between technical efficiency and cassava production in Nigeria. It suggested that technical efficiency, which is directly related to effective utilization of inputs in production, enhanced cassava output, farm income, cross margin, garri yield and reduced annual processing cost of the cassava farmers in Nigeria. The study further suggested that long experience in farming, education and extension contact enhance the technical efficiency

of the simple cassava farmers. This implies that the policy intervention such as increasing access of farmer to improved cassava varieties, cost effective improved cassava processing technology, available cassava markets, improved extension service, education, financial and credit facilities will further enhance the technical efficiency of the sample farmers. Also policy intervention involving the provision of enabling environment that will attract farmers with long experience in cassava production will enhance technical efficiency in cassava production.

Rose T.A (1999). In her work "The Role of Women in Agriculture" the work make critical analysis of women participation in food production particularly cassava production in Nasarawa state. The work observed that women play a leading role in the processing of cassava into cassava products like 'garri', 'alebo', chip. To compliment this gesture the Nasarawa State Agricultural Development Programme in 2009 introduced Women in Agriculture (WIN) to boost group/individual farming activities among women farmers in Nasarawa state. The study suggested that state intervention in food production, particularly, cassava production in terms of inputs, credit facilities, improved varieties, and extension service will promote food security for women in Nasarawa State.

Ogo, A.E (2012) 'Economies of Cassava Production in Udege Development Area of Nasarawa Local Government of Nasarawa State, Nigeria' the study adopted simple descriptive statistic such as means and percentages to analyze the social-economic attributes of cassava farmers and the output level of cassava production in Ugede development area of Nasarawa state. The growth margin and production functions analysis were also used to determine the cost and returns from cassava production and efficient utilization of resources in cassava production. The study observed that resources in cassava production were effectively utilized implying that yield and gross returns could still be minimized. The study recommended that there is need to train farmers on the effective use of resources in order to reduce overutilization. Also, farmer's equipments such as tractors and animal traction equipment should be supplied at affordable prices and for hire purchase so as to ensure timelines of farm operation and to reduce drudgery.

Abli, Ifenkwe, and Emerhirhi (2014) in 'Analysis of Women Participation in Cassava Production in Rural Communities of Rivers State, Nigeria' analyzed the level of participation of women in cassava production in Rural Communities of Rivers State. To achieve this, the study used descriptive statistical forms such as frequency, percentages, mean and variance (inferential) for data analysis in respect to socio-economic characteristics of the respondents to determine the level of participation of rural women in cassava production and examine the

constraining factors to effective's participation of rural women in cassava production in the study area. The study was conducted in four local government areas (Emohua, Ikwerre, Echie and OgbaEgbemaNdoni) using the multi-stage random sampling technique. Thirty (30) respondents were drawn from two rural communities in each of the local government areas, using simple random technique; this gave a total number of 120 respondents that were interviewed accordingly. The study revealed that rural women were involved in the production activities like weeding, planting material, soil tillage, harvesting among others. Lack of synergy between government and the rural people were some of the constraining factors to low output in cassava production by the rural women. The study therefore recommended that the need for group formation among rural women to enable them have a greater voice in terms of decision making process on land ownership and easy access to credit facility.

Abuldu; Haruna; Idehen; and Jamilu, (2014) in their work 'Adoption of Recommended Cassava Production Practice among Farmers in Edo State' investigated the adoption of recommended cassava production practices among farmers in Edo State. To achieve this feat, two local governments were purposely selected from three senatorial districts which comprise Edo South (Akoko Edo and Etsako), Central (Owan and Oredo) and South (Esan and ovia). The data were analyzed using Descriptive and Regression Model. The recommended that farmers should form cooperatives for easy access to credits and farm inputs as well as adequate information on new farming practice and other innovations.

Kagbo; Ahamdu; and Lyock, (2014) in 'Empowering Small-holder Women in Cassava Processing and Marketing in Nasarawa State, Nigeria' established that women in Nasarawa state play great role in the processing and marketing of cassava unlike the men's folk who are faced with issues of inadequate capital, the right type of technologies and accesses to extension services which will increase their productivities. The study suggested that government should intervene in providing women with incentives such as providing capital and processing equipment with a view to empowering them in cassava processing and marketing because women have the potential of reforming the state economy from poverty stricken to a more vibrant economy.

Okeke; Onwubuya; Obonna; and Nwaleiji, (2014), in 'Emerging Roles of Women Farmers' Cooperative in Cassava Processing in Anambra State, Nigeria', collected data through interview schedule and analyzed using descriptive statistics. The study observed that low extension contact and inadequate knowledge of modern techniques in cassava processing was a major obstacle to activities to women's cooperatives. The study therefore

recommended that efforts should be geared toward improving the roles of women's cooperatives in cassava processing through provision of extension services and improved technologies by relevant agencies like agriculture development projects in the state.

Odoemeene and Otawa, (2011) 'Economic Analysis of Cassava Production in Benue State, Nigeria' was conducted to analyze the economics of cassava production in Benue state. Data collected for this study were analyzed using descriptive and inferential statistics to determine the level of cassava production; determine the returns to cassava production and evaluate the profitability of cassava production in the study area. The study suggested that investing in cassava production enterprise is profitable.

Ploeg (2003) in 'The Peasants Mode of Production will be Visited' described peasants as part of awkward class which depended solely on the use of crude implement like hoes and cutlasses, in fragmented landholding and produced food mainly for consumption. He advised that peasants should engage in cooperative production to add value to the production processing to enable them produce more for commercial use to enable them meet their other needs.

Ibrahim and Onuk (2010) in 'The Impact of Root and Tuber Expression Program on Root and Tuber Crops Production in Nasarawa State, Nigeria' examined how root and tuber expansion program had impacted on root and tuber crop production in Nasarawa State, Nigeria. Purposive sampling was used to select 60 beneficiaries and 60 non-beneficiaries for data analysis using descriptive and inferential statistics. The technical efficiency scores for the beneficiaries ranged from 0.3 to 1.0 with a mean of 0.84 while that for the non-beneficiaries ranged from 0.94-1.0 with a means of 0.66.The study concluded that root and tuber expansion program has made some positive impact on its beneficiaries in Nasarawa state. But a lot more could still be achieved if root and tuber expansion program could be extended to cover all the local government areas in the state.

2.9 Theoretical Framework

To carry out a research of this magnitude, it will be pertinent to have a theory or some group of theories as the framework of analysis in order to have a clear picture of the subject under review. A theory is described as a combination of concepts, precepts, principles, propositions and definitions that explain or predict events or situations by showing the relationship between two or more variables. Theories are used to study situations and to predict future occurrences. They enable us to learn from the past, understand the present and

predict the future. Theories delineate the boundaries of a problem, indicating where the problem starts and how the problem can be conceived and analyzed. Theories explain situation.

Theoretical framework is an embodiment of theories, precepts, and assumptions that tend to explain situations or events. It could also be described as the network of reasoning that comprises assumptions about certain observed events and expectations in respect to how those events relate to each other.

Therefore, the study adopts political economy with emphasis on Marxian Political Economy approach as its theoretical base. The importance of adopting Marxian political Economy is to have an insight into the dynamics of social work through a historical construction. This will enable us understand the dynamic of the social and economic interactions between the owners and non-owners of the means of production and how the interaction between the two classes affect production process.The theory will help us to have a better understanding of the subject under review and see how the major and minor players in cassava sub-sector interact with each other and how cassava production affected them.

2.9.1 Political Economy

The term political economy originates from two Greek words “politeia” and “oikonomia”. The word “politeia” stands for “social organization” while “Oikonomia” comprises two words: “oikos” meaning house hold or household affairs and “nomos” law. The concept of political economy was first adopted by the French economist named Antonie de Mon (1575-1621), in a publication titled the ‘Laws of Social Economy.’ Antonie propounded the theory of merchantalism, a bourgeour school of thought that represents the interest of commercial capital. The merchantalists were of the view that the wealth of Nation is determined by the circulation process.

In the early stage, political economy was considered to be a branch of social science that deals with the inquiry into the nature and causes of the wealth of Nation.Now adays Political Economy becomes a field of study that is concerned with the primacy of material production as the basis for survival. It is also interested in the political arrangement that guarantees, sustains, and projects class inequality that provides legal sanctions for the division of society into the “have” and “have not”. Here for instance, one can not avoid the central issue of political domination, which is the question of state and the state power.

However, in confronting issues, political economy is dynamic rather than static; in other words, it studies these processes precisely in other to understand change in society. As a matter of fact political economy sees change as an inevitable part of social progress especially changes that are consequences of conflict between different social classes and forces that are fundamentally opposed to one another. In this sense, political economy becomes the study of contradiction, of crisis and of social conflict; and how such contradictions are resolved or not resolved to determine the movement of human society.

The concept of political economy as the study of wealth undermines its historical texture. Political economy as a science does not only study material goods but also studies social relations that exist among people in the process of production. In all conditions, production is organized in social form; people do not produce material goods as lonely individual but produce jointly in groups and societies. Marx (1972) explains that in production, men entered into relations not only with nature. They produce only by co-operating in certain ways and mutually exchanging their activities. In order to produce, they enter into definite connections and relations with one another and only within these connections and relations with nature, that production takes place. The social relations that exist among people have not been the same at different historical epoch of the development of human society. In some circumstances, they are relations of mutual co-operation and understanding, and where society is divided into two classes, one class is dominant and the other is subordinate, the social relations will be relations of exploitation.

The distinction between the bourgeois and Marxist conception of political economy depicts in this relations of production. The bourgeois school of thought based their analysis on the technical aspects of production and ignores the social relations that exist among men in the production process. They ignore the relationship between production, distribution, exchange and consumption. The Marx conception argues that production has a significant role to play in respect to distribution, exchange and consumption and above all social relations that emerges in the production process.

The central focus of political economy is the study of the relationship between the bourgeoisie and the proletariate in the capitalist mode of production. It provides a clinical analysis of the nature and character of capitalist mode of production. As a field of study, political economy relies on the interrelationship between the political and the economic in a particular society. As a result of this, it provides a vivid conceptualization of the

interrelationship between the class that exploits and the class that is exploited. The class that exploits is the ruling (bourgeoisie) class and the class that is exploited is the subject (peasant) class. To intensify the exploitation of the subject (peasant) class, the ruling (bourgeoisie) class enters into alliance with the private sectors and other foreign capitals to determine what to produce, how to produce and exchange. This alliance has held back the productive capacity of the developing countries. In order to meet up with the developed countries and improve the living standard of the citizens, most developing countries adopt pragmatic approaches and measures to address the lingering problem of industrial decay. This indicates why the colonial and postcolonial agricultural policies in Nigeria are targeted at promoting industrial development without taking into account the socio-economic and political implication of such policies on the peasants.

Thus, political economy among other things studies the social and institutional processes through which certain groups of people, and economic elites influence the allocation of scarce productive resources now and in the future, either for their own benefit exclusively or for the larger population as well. Political economy is therefore, concerned with the relationship between politics and economic, with a special emphasis on the role of power in economic decision making (Todaro, 2009).

Agricultural policies in Nigeria represent the interests of the dominant class and their collaborators. By the 1960s, nearly all businessmen were necessarily in politics because the state had become the main source of finance and contract; and nearly all politicians were in business (Wringley, 1974). Through the state capital relationship, the bourgeoisie designed measures such as loan, aid, commoditization, monetization and production for export to keep the peasants permanently under penury. And to intensify and sustain these contradictory measures the Nigerian state changes its agricultural policies frequently. Each policy decision in each of the regimes represents personal interest of those in position of authority and these personal interests determine the nature and direction of agricultural policies and their continued changes. This scenario indicates why the postcolonial agricultural policies in Nigeria have not been in favour of the peasants.

2.9.2 Political Economy and Material Production

Political Economy is the science of laws governing production and exchange of material means of subsistence (Henecke, 1982). The way people organize their production,

the instruments they use in the production process and the manner in which the products of labour are exchanged and consumed are fundamental to the study of political economy. Thus, the classical political economy investigates the causes and nature of the wealth of the nation and how the wealth can be used to satisfy the material needs of the society.

A classical political economist David Richardo advanced the labour theory of value, which defined labour as a measure and a source of all value and determine laws which regulate the distribution of rent, profit and wages. He concludes that the national product available for distribution was determined principally by the productivity and availability of labour. Labour is the conscious endeavour undertaken by man to modify nature and make it favourable to himself. Labour is thus, the primary condition of man's life without which he cannot exist. When a man produces just enough for his consumption, he is involved in necessary labour. What he produces is called the necessary product. The product is called necessary because man needs it to live. In primitive societies people engaged in necessary labour and there is no division of labour. Every body produces for consumption. As societies developed, production for use value could no longer stand the test of time because people produce more than they can consume. This is known as surplus labour and the product is called surplus product.

The history of societies has been the history of the struggle for the surplus product of man. Any group that succeeds in appropriating the surplus automatically becomes the dominant group in the society. It is therefore, imperative for this group to maintain their hold on power, from where they make laws andespouse values geared towards maintaining the status quo (Obi, 2005).

Political Economy sees change as an integral part of social progress because it is dialectical. A dialectical approach recognizes the significance of change in the production process. It sees change as a product of the interaction of opposites in the dynamics of social development. For example, class contradiction and interaction between base and superstructure in a social formation (Barango, 1980). The interaction between the base (economy) and superstructure (state) determine the movement of human society from one mode of production to another, how man thinks, how he produces and exchanges.

In slave owing societies, the control of the means of production has not been shared equally by man, some produce as owners of the means of production while majority produce

as non-owners of the means of production. This kind of production structure has brought many men into dependence upon the few (Jones, 2002). The small farmers have been denied the chance to develop themselves because they have been compelled into slavery. They produce a lot of food but they are denied access to their products by their exploiters with the support of the state through all kinds of legislation, tactics, strategies and merchant operations.

Appropriating the surplus of the peasant production, products become the main concern of the dominant class. The control of surplus product is at the root of the quarrel between Marxism and Capitalism. While the Marxists see appropriation of the surplus as exploitation which fuels antagonism between classes, the capitalist 'sees it as profit and the essence of production and investment (Obi, 2005).

Political economy studies classes and the way in which production and distribution of surplus is carried out in the society. Marx posits that classes emerge where the relations of production involve a differentiated division of labour, which allows for the accumulation of surplus production that can be appropriated by a minority of grouping, which thus, stands in an exploitative relationship to the mass of producers. The appropriation of nature and surplus labour are both controlled by the bourgeoisie, workers are separated from the means of production and can gain access to them only by selling their labour power to others. Workers are freed by legal constrain such as selfdom or slavery that prevent their disposing of their owned labour power; the purpose of the employment of the workers become the expansion of a unit of capital belonging to the employer who is functioning as capitalist.

Political economy, particularly the Marxian perspective gives much credence to the material condition of the society as the basis of social life. The approach is essentially based on the historical and dialectical materialism. That is material conditions, particularly the economic structure, exert decisive influence in the formation or structuring of social life. This basic assumption on the role and impact of economic system in shaping the social system provides an essential point of departure, for the exploration, discovery and explanation of the law of motions of the society. The economy system exerts pervasive influence in the shaping of social formation (Chukwujekwu, 2001).

2.9.3 Classical Political Economy

Traditionally, political economy was the scientific enquiry into the nature and causes of the wealth of nation. At this period the main concern of political economy was the study of

production, distribution, exchange and consumption. Thus, the classical political economists focused their attention on the growth and development of the economic system. What is called political economy was then referred to as economics.

The main concern of the classical political economists at the beginning was the nature of transition of their society from feudal agrarian social formation to industrial capitalist system. They experienced serious upheavals and conflict of interests embedded in the new world order. This explains why the classical political economists concentrated on liberal and Laze-faire doctrines to contravene the earlier dominant perspective of mercantilism and its 'protectionist policies.

The mercantilist economic thought was advanced by a French economist Antoine de mon (1575-1621) who profounded the theory of merchantilism. The merchantilists were of the opinion that the wealth of the society is determined by the circulation process. But the main study of the political economy emerges when the theoretical excavation of the society transcend from the sphere of circulation to the process of production.

Therefore, merchantilism was a pre-history of the political economy as it concentrates on the circulation process and sees political economy as a science of trade balancing. Merchantilism was dethroned in Europe in the 17th century and the labour theory of value emerged. This development marked the beginning of the classical political economy by William Petty (1623-1687), Adam Smith (1723-1779) and David Ricardo (1772-1823).

By this time, political economy shifted attention from circulation process to production process where surplus value was created. The creation of surplus value in agriculture was to be the main focus of political economy. It is in view of this that Adam Smith describes political economy as the science of wealth creation in his inquiry into the nature and causes of the wealth of the nations. He sees political economy as a field of study that investigates the sources of the wealth of the nations and how such wealth can be used optimally. Samuelson (1972) describes economics as the study of wealth. Also David Ricardo follows this form of analysis.

James (1967) posits that the classical political economy was essentially a science of the economy, their way of defining the problems of the economy, however, had a broad social orientation, including questions about the social organization of production and the distribution of income. The approach is interested not just in explaining the process or processes of generating and distributing wealth but also how in doing so, the structure of social power determines who owns and controls the means of production and how the shares of various social group and classes are determined.For instance, it is interested in why all the

social groups do not have equal share of what is generated as the total wealth of society or in the other words it is interest in the root of social inequality.

Richardo (772-k823) in his work title "Principle of Political Economy and Taxation" postulated the labour theory of value, which described labour as a measure as well as source of all value; he also made frank effort to determine the law which regulates the distribution of rate, profit and wages. In his analysis of the theory of value, he posits that the national product available for distribution was determined principally by the productivity and availability of labour.

In his contribution to the subject matter of political economy IbnKhaldum (1332-1406) explains that a country's wealth consists of its industrial population, while the growth in the number of workers, the division of labour and the rise of cities was the main way of accumulating wealth. This implies that the wealth of the nations consist not only the natural resources but also the people.

The classical political economy has been criticized on the ground that it has not been able to analyze production process in relation to material base of society. It has not been able to articulate the internal contradiction between the emerging capitalist class and the working class in to the means of production. Their specific concerns and the extent of available information and tools set definite limits on their enquiry. It could be said, in terms of their explicit value judgments and value positions, they had not matured to the contemporary standards of 'positive economics' (Obi, 2005).

2.9.4 World System Approach of Political Economy

The world system perspective of political economy is the most recent approach of political economy. The approach is born out of the desire by some scholars to address the lingering problem of underdevelopment in the third world countries. The scholars associated with world system perspective are Andre Gunder Frank, Emmanuel Wallerstein and Paul Baran among others.

The world system perspective links the development crisis of the third world countries on their contact with the imperialist capitalist countries. That imperialist penetration and domination of the third world countries instead of developing the productive forces of these societies resulted in its underdevelopment that the situation of underdeveloped countries can only be understood when the decisive role of external factors is considered. The social structures of colonies, ex-colonies or non-colonies are not the results of autonomous historic development, but they are determined by foreign and exploitation. Thus, exogenous factors

stand in an individual explanatory context of 'structures of dependence' of third world countries (Jones, 2002).

Historically, the underdevelopment of the Third World countries have external root, but the results are manifested internally and its elimination will require a concerted efforts of the government and people of the underdeveloped world to develop an alternative framework of development. It is in the light of this that the Economic Commission Latin America advocated an inward oriented development path for Latin American Countries. This path emphasized industrialization, state planning, an increased role for the state and protectionism.

The world system perspective on political economy have been criticized for neglecting class analysis in understanding the structural economic deficiency and exploitation existing in Third World countries which paved way for external exploitation.

2.9.5 Marxian Political Economy Approach

The Marxist political economy as exemplified by Marx and Engels (1977) places primary emphasis on the social relations between people in the production process. They focus on the exploitative tendencies inherent in the capitalist mode of production where the Bourgeoisie exploits the proletariats. The wage worker or proletariat sells his labour power to the owners of land and factories. The worker spends one part of the day covering the cost of maintaining himself and his family, while the other part of the day he works without remuneration, thereby creating surplus value or wealth for the capitalist.

According to Engels (1974), Marxist perception of political economy is the science that explains the conditions and forms under which the various human societies have produced and exchanged and on this basis have distributed their products. Political economy is not the production process that is the subject matter but the social relations erupted under which people organize their production, distribution and exchange. These relations in the process of production are objectively predetermined by the mode in which labour power is joined with the material elements of production, for on these depend the subsequent distribution, exchange and consumption of the material production of the society (Kuznetsov, 1977).

The Marxist political economy approach is opposed to the Bourgeois school of thought which merely treats man as part of instrument used in accomplishing the production of goods for primitive accumulation rather than as a human factor should be treated with utmost care.

Marxist studies of the misery and exploitation of the proletariat in the production process is the point of departure from the Bourgeois schools of thought.

The subject matter of Marxian Political Economy is the production (economic) relations between people. These include: the forms of ownership of the means of production; the position of the various classes and social groups in production and their interrelations and the forms of distribution of the material wealth (Obi, 2005). Marx thus, argues that when man produces products either as the owner of the means of production or the non owner of the means of production, the role he plays arising from what Marx called the social relations of production determined how man philosophizes; how he thinks, perceives his culture and politics.

Marx maintains that the sum total of relations of production, the way men use to organize their social production as well as the instruments they use constitute the real basis of society and from which there arises legal and political superstructure. Thus, the way men produce their means of subsistence conditioned their whole political and intellectual life. Whenever the means of production are held as private property, the relations of production will likewise be relations of domination and exploitation.

Marx and Engel write in their manifestos of the communist party that contrary to all previous interpretations of history, the history of hitherto existing society is the history of class struggle. Marx and Engel posit that it is this struggle between these antagonistic classes in society that is responsible for the revolutionary transformation of society or even the common ruin of contending classes. According to materialist conception of history, ultimately determining element in history is the production of real life. The economic element is the only determining one.

However, one unique thing from the above extract of production and reproduction of real life is that, the mode of production includes forces of production and production relations. The former refers to the tools, technology, the level of organization of labour and all that is involved in appropriation of nature. While the later refers to ownership of the means of production of material life. Thus, when the forces of production and production relations interact with each other undoubtedly lead to change from one mode of production to another and this depicts the essentiality of dialectics which Marx adopted it to show the various stages in the development of human society. The society changes from primitive communal

to slave to feudalism to socialism. During the primitive society, instruments of labour had been mostly of stone but during the age of the slave owing system, iron smelting was discover and tools began to predominate.

Marxist doctrine of the primacy of material production in human life rests upon the belief that it was the pressure of man's needs that first forced him upward into his humanity and then continues to press him onward and upward. Thus, the content of his reason must be determined by conditions external to his reason, conditions which are strictly material (Jones, 2002).

Some critics of Marxism believe that Marx was an economic determinist;that the economy forms the foundation which explains the character of political and legal among others does not mean that they are mere derivatives. The superstructures also dictate and shape the form of the base. Their relationship should be seen as the reciprocal determination of the base and the superstructure, the economy being the base or substructure.

CHAPTER THREE

THE STATE AND FOOD POLICIES IN NIGERIA

3.1 The State

The state unlike other concepts in social sciences is subjected to a lot of meanings and interpretations. This is because it has been defined by different philosophers and political analysts depending on their ideological background. Both the liberal and Marxian scholars have not agreed on what constitute the state. Liberal scholars see the state as an institution for orderly progress of the society and an embodiment of justice for all. It seeks to suggest that the state exists mainly to exercise public authority and that authority is accepted by majority of the members of the state. Neo-liberal such as Hobbes, Locke and Smith (1937) see the state as a neutral arbiter in the contending social classes in the society.

The Marxian tradition sees the state in terms of domination, power, violence and material conditions of administration. It views the state as a machine of repression which enables the ruling class to subject the working class to the surplus value of extortion. Marx (1842) posits that the state is an embodiment of the law and freedom. But in the Communist Manifesto, Marx and Engles contend that the state is a committee for managing the common affairs of the whole bourgeoisie. This shows that the state is an instrument in the hand of the economically dominant class for the maintenance of class interest. For the Marxist tradition, the development of the productive forces in the society produced surplus value and thus the appropriation of property for private use that necessitated for the constitution of the state. In the same vein, Alavi (1972) notes that because of the absence of a fully developed indigenous class, the state has largely remained an instrument of the ruling class in the promotion of capitalist accumulation, under the pretext of national development.

In this study, emphasis is placed on the post-colonial states in Africa and Nigeria in particular, the role the state in the appropriation of the surplus of the peasants through the state institutions and merchant operations. Alavi (1972) posits that the state in the post-colonial society is not the instrument of a single class. It is relatively autonomous and it mediates between the competing interests of the three propertied classes namely the metropolitan bourgeoisie, the indigenous bourgeoisie and the landed classes, while at the same time acting on behalf of them all to preserve the social order, in which their interests are embedded, namely the institution of private property and the capitalist mode as the dominant mode of production.

Thus, the above observation by Alavi on the contradictions inherent in the post-colonial economy in terms of class struggles and class alliances, it will be interesting to look at each social formation or state with its unique feature instead of generalizing all capitalist states because of their identical historical antecedent. It was on the basis of this that Beckman (1982) gives a classical analysis of the Nigerian state. He contends that the primary role of the Nigerian state is to establish, maintain, protect and expand the conditions of capitalist accumulation in general, without which neither foreign nor Nigerian capitalists can prosper. The World Bank through the state introduced "Integrated Rural Development" essentially to "stabilize peasant communities while raising the surplus available for appropriation".

The post-colonial states in Africa in general and Nigeria in particular exhibit the class characters of the capitalist state which encourage commodity production and property accumulation. Beckman, (1982) argues that the Nigeria state has been both a major owner of the means of production and a stake holder in several capitalist enterprises. It collaborates with both domestic and foreign capitalist interests in playing this role. Sometimes it tends to serves as an agent of imperialism; at other times it may tend to serve the interests of foreign bourgeoisie, and at other times it may tend to serve interests of the domestic bourgeoisie, but at times, it serve the interests of capital in general.

However, in promoting capitalist development the Nigerian state is to establish, maintain, protect and expand the condition of capitalist accumulation in general, without which neither foreign nor Nigerian capitalists can prosper (Beckman, 1982). The state appropriates the surpluses of the peasants through state institutions, of policies and merchant operations. This state domination and subordination of the peasants in the process of production, distribution and exchange contributed significantly to the underdevelopment and food insecurity in Nigeria.

To further compound the problem of the peasant the capital uses the state to direct and regulate the conditions of peasant production; it determines what to produce, how to produce, to whom to produce and how the products of labour are to be utilized. Sometime the capital initiates policy on general agriculture in case of National Food Acceleration Production Programme, Green Revolution, Operation Feed the Nation or some time it initiates policy on a particular product such as the National Policy on Cassava Production to subject the peasants to the imperatives of commodity production.

The promotion of commodity production and cash crop economy by capital facilitates the incorporation of the peasant sector to the world system of capitalist accumulation. The incorporation brought about the political and economic subordination of the peasantry which

is the main features of the post-colonial state like Nigeria as it conditions the nation's economy to satisfy the interest of its ruling class, the imperial bourgeoisie and its local collaborators. The class character of the Nigerian state which had it origin from colonial experience has negative effects on both the society and economy. This brings about domination and exploitation of peasant by capital with the support of the state.

Therefore, the capital defends and protects it interests in all ramifications with all the wealth at it possession and the power of the state without considering the interests of the peasants or the downtrodden. It is in the light of this that Marx and Engel posit the executive of the modern state is but a committee for managing the common affairs of the bourgeoisie. The managers of the modern state find it difficult to moderate the conflict between antagonistic classes, they are always preoccupied with initiating policies to exploit and appropriate the surplus of the peasants and peasant production. This strategy has contributed significantly to the marginalization of the peasant and rural food insecurity in Nigeria.

3.2 Colonial Agricultural Development Strategy

Prior to the coming of colonialism in Africa agricultural production was communal and subsistent in nature. The primary target of production was for used value not commodity production. But our contacts with colonialism marked a turning point in the production processes and production relations. This is because Africa economies were decisively drawn and integrated into finance capitalist system of surplus appropriation. This integration led to disarticulation and monetization of the African economy; unequal exchange, exploitation, domination and dumping.

The penetration of Africa began with the control of trade, enforcement of article of trade in slave and introduction of an exchange system among others (Jones, 2002). Ake (1981) argues that colonial policies oriented the different sectors and regions of Africa to the metropole. Each sector had a strong tie with the metropolitan economy … they might be said to be an integral part of the metropolitan economy. He goes further to say that the imperialists exploited the peasants by imposing agricultural development programmes which put the peasant in the position of using inputs such as fertilizers, and different techniques and tools; the process of compelling the use of these inputs and techniques was ostensibly to help the peasant, but infact they aid the integration of the peasant into the exploitative commodity relations, … imposing laws which standardize products and production process.

One of the major obstacles to agricultural production in the developing economies and Nigeria in particular can be attributed to the nature of the colonial state and colonial agricultural policies. Nzimiro (1977) observed that agricultural policies during the colonial era in Nigeria neglected the production of food, but emphasized the development of capitalist commodity production. This emphasis on cash crops benefited the colonial regime.

The problem of agricultural underdevelopment began with the integration of the Nigeria economy to the world capitalist system of surplus appropriation of peasant sector with the support of the colonial state. The role of colonial state in this regard was to provide favourable grounds for effective commoditization and appropriate the surplus of the peasant production by the international capital and their allies. Therefore, the introduction of peasant commodity production and cash crop economy by the colonial state encouraged the exploitation of the Nigeria peasants by capital.

3.3 Britton Woods System of Food Production

Britton wood institutions are built around World Bank, International monetary Fund, (IMF) and International Trade Organization among other international economic and financial system. The Britton wood economic and monetary system was designed to avert the kind of economic disasters that had occurred during the Great Depression of 1929/33. The IMF was to preside over a system of relatively stable exchange rates and assist countries with temporary balance of payment problems. The World Bank was to assist with the reconstruction of Post-war Europe and provide finance for third World development; While G.A.T.T was to help to liberate trade in manufacturers (Onimode, 2000).

The International Monetary Fund (IMF) provides short-term financial assistance to needy nation while the World Bank was designed to provide long term development loan. The Third World nations depended so much on the IMF and World Bank for loan, usually with destructive conditionalities. They needed the loan and assistance to enable them restructure their economics that have been ravaged through slavery, colonial expansion in the forced incorporation of Latin America, Asia and Africa into world capitalism, and the dialetics of uneven North-South development — within the single world capitalist system (Williams, 1972; Wallerstin, 1979; Hopkins and Wallerstin, 1980).

Both slavery and colonialism also constituted the mechanisms of the enforced incorporation of Latin America, Africa and Asia into the capitalist international division of labour. This global division of labour took shape from around the time of the Industrial

Revolution in England (and later Western Europe) from about 1750 to 1850 (Hopkins and Wallerstin, 1980). The industrialized nations of the world predominated in the industrial production, finance capital and technology and the Third World countries were compelled to be in the primary production and provided raw materials for industrial revolution in Europe and America and meet up with the food demand of the metropolis. This unequal international capitalist division of labour also started the global process of uneven development between the North and the South (Rodney, 1972 and Brown &Tiffen, 1992). The Third World countries were used and exploited to expand capitalist development at the centre of world capitalism, and this same organic process ensured the simultaneous underdevelopment of the periphery of global capitalism (Galeno, 1974).

The continued underdevelopment of the Third World countries is associated with the slavery, colonialism, neo-colonialism, imperialism, globalization capitalist industrialization in the North America, Western Europe and Japan, and in addition the intense intra-European and subsequent intra capitalist rivalries among the developed countries for cheap labour from the Third World, sources of raw materials for industrial production and markets for surplus manufactured goods and capital. The prevailing division and sub-division of the world among the western capitalists brought about the fall of British dominion before the Second World War. After the Second World War, America emerged as the world super-power and bought the idea of the Bretton Woods International Economics and financial system to rebuild and restructure the post war economy.

Thus, American hegemony tends to impose its will on the global economic system. The IMF and World Bank are the most important instruments for the pursuit of American interest. The structural adjustment programme pervently pursued by the IMF and World Bank are US Agenda for the resubordination of the south. Structural adjustment programmes designed to accelerate deregulation, trade liberation and privatization had almost everywhere institutionalized stagnation, worsen poverty and increase inequality (Bello, 2004). The economics of the Third World Countries dwindled under the IMF and World Bank sponsored SAPs regime. This is because those countries engaged in indiscriminate financial liberalization, demanded by Washington and the Bretton Woods Institutions (Bello, 2004).

The Structural Adjustment is the general term used to describe a package of measures which IMF, the World Bank and individual western and donors persuaded many developing countries to adopt during the 1980s, in return for a new wave of loans (Hoogvelt, 2001). Third world countries depend greatly on the international donor agencies and western capitalist countries for aid and loans. This has created a culture of dependency and

underdevelopment of the Third World. Moyo (2009) posits that the notion aid can alleviate poverty is a mirage since aid has been and continue to be, an unmitigated political, economic and humanitarian disaster for most developing countries. She goes further to proclaimed that aid has the potential of choking off investment, encourages dependency and facilitates corruption, perpetuates underdevelopment and guarantees economic failure.

The Structural Adjustment Programme adopted by IMF is often attached with a lot of conditionalities which include currency devaluation, deregulation of prices and wages, reduction of public spending on social programmes and state bureaucracies, removal of food subsidies and others on basic necessities, trade liberalization, privatization of parastatal enterprises, and the expansion of the export sector; the latter in the case of agriculture- often at the expense of food production (Hoogvelt, 2001). The austerity policies attached to World Bank and IMF loans led to intensified poverty in many African countries in the 1980s and 1990s. The removal of food and agricultural subsidies caused prices to rise and created food insecurity (Peet, 2001).

As part of the Bretton Wood system, food and agricultural production are to be backed by infrastructures, policies, extension services and loans. The World Bank and International Monetary Fund placed emphasis on mechanization of agriculture and the use of chemicals in the production process and strategies like the use of improved varieties, fertilizer and other modern techniques have been recommended as the best ways of revolutionizing food production. The Nigerian agricultural policies, programmes and strategies were designed in line with the Bretton Wood system. For instance Operation Feed the Nation, Green Revolution, Cassava Multiplication Programme, Root and Tuber Expansion Programme and National Cassava Initiative encouraged and promoted the use of modem technology like tractor, plough, herbicide, insecticide, fertilizer etc in agricultural production. All these machines and chemicals are supplied to Nigeria by the western capitalist countries without considering the interest of the peasantry who are compelled to adopt a new method of farming.

The Multinational National Corporations are an integral parts of the Bretton Wood institutions that played great role in the subordination of the economy of the developing countries like Nigeria through transfer of technology and investment. MNCs which are described by many scholars as the expanded colonial trading companies are the vanguard of the most advanced technology and purveyors of over-priced obsolete equipment. They are exploiters of raw materials and labour, but also the invaluable allies of petty bourgeoisie

elitist. They are source of capital outflow (Jones, 2002). They sharpened the trading and investment policies of the Third World countries generally and Nigeria in particular.

The Bretton Wood system of food production promotes and protects the interests of capitalist class and subject Nigerian farmers to the imperative of producing for external markets. The removal of food and agricultural subsidies is part and parcel of the trade liberalization policy of the World Bank, IMF and WTO undermines the development potentials and food security in Nigeria.

3.4 The Post-Colonial Agricultural Production Strategy

The ruling class in the post colonial state in Africa initiated certain development policies such as input substitution industrialization, export promotion, expansion and diversification of export commodities, integrated rural development, Green Revolution among others to boost the productive capacity of the continent. For instance, the Green Revolution involves massive introduction of the mechanization, application of insecticides, pesticides, chemical (modern) fertilizer, irrigation, projects, high yielding variety (Ake 1981). They believe that "modern technology could solve our problem of food crisis, yet in the countries such as India, Bangladesh, Pakistan and even Nigeria among others where this Green Revolution was tried much longer ago, food crisis has continued to worsen rather than availability and affordability of food.

Nzimiro (1977) posits that this development philosophy was based on the concept that development should follow a specific evolutionary dimension. The Western capitalist societies were regarded as models of which the underdeveloped nations should follow. For Nigeria it meant that Nigeria should follow the capitalist path to development hence the British social scientists who advised the colonial regimes defined for the ruling class the path they should follow. These criteria decisively influenced agricultural policies in Nigeria. The rate and direction of agricultural development was determined by the British and taken over by the Nigerian ruling class. That all agricultural policies were geared to serve the interest of the departing colonial capitalists and that these agricultural policies have not altered in the neo-colonial state controlled by the comprador bourgeoisie (Nzirimo, 1977).

Ake (1981) notes that agriculture remains the backbone of the post-colonial economy;but these contributors to the finance of the colonial and post colonial state before the oil money were still not involved in the making of agricultural policies such as Operation

Feed the Nation and the Green Revolution etc. The entire period was marked by the imposition of agricultural programmes on the peasants and their fate was at the whims and caprices of the colonial and post-colonial ruling class. The major agricultural policies adopted in the post-colonial Nigeria are:

3.4.1 National Accelerated Food Production Programme (NAFPP)

The National Accelerated Food Production Programme (NAFPP) was inaugurated in 1973 by the Federal Military Government of Nigeria. The programme according to Eminue (2005) was geared towards increased mobilization of peasant farmers, large scale agricultural enterprise and agricultural cooperatives, the use of high-yielding inputs and improved agronomic practices-fertilizers and agro-chemicals, easy credit facilities, storage and marketing outlets. The programme was designed to be an agricultural co-operative between the Federal Government, State Government and individual farmers in the states with the aim of stimulating farmers to rapidly increase staple food production (Obi et al 2008).

Nwosu and Odii, (2000) spelt out the fundamental objectives of National Accelerated Food Production Programme as follows:

i. Develop a package of technology that farmers could adopt to achieve higher productivity.
ii. Develop an input delivery system through an integrated research/ extension programme;
iii. Improve storage, marketing, credit supply and prices in such a way that both farmers and consumers are better off; and
iv. Develop manpower to carryout the programme

The basic strategy of the NAFPP was to use individual farmers to produce and multiply improved seeds for wider distribution among the farming population (Ojo 1991). The programme did not go down well as it was not able to achieve the purpose for which it was meant for. By 1985 the programme was a shadow of itself. The inability of NAFPP to enhance agricultural production through mobilization of peasant farmers, large scale agricultural enterprise and agricultural cooperatives and the inability of the state to properly execute the policy without any fear or favour contributed immensely to the poor implementation of the policy.

3.4.2 Agricultural Development Projects (ADPs)

The Agricultural Development Projects (ADPs) were set up in Nigeria in the mid-1970s with the aid of the World Bank. The programme aimed at stimulating the agricultural sector through "development and provision of input delivery system, low cost agricultural feeder roads, water supplies, soil conservation works, effective extension services as well as providing credit and marketing services".

The main objectives of the ADPs include the following:

(a) Construction of farm service centers
(b) Construction and maintenance of rural roads
(c) Provision of seeds, fertilizers, chemicals, and mechanical implements for sale on cash or credit basis at the farm service centers.
(d) Training of staff and farmers in modern farming techniques
(e) Provision of planning assistance and farm management (Osuniogun and Oludimu, 1986:115).

It is obvious that the World Bank, Federal and State governments contributed financially toward the objectives of the agricultural development project in Nigeria. But those entrusted with ADPs funds could either divert it for personal use or misappropriate the funds.

Below are the crop productions by farmers in ADPs and accelerated development area project:

1. Yam - 2,153 million tonnes
2. Sorghum - 1,953 million tonnes
3. Millet - 1,564 million tonnes
4. Cassava - 918,716 million tonnes
5. Maize - 488,396 million tonnes
6. Cowpeas - 474,450 million tonnes
7. Groundnuts - 197,910 million tonnes
8. Rice - 112,924 million tonnes
9. Cotton - 22,869 million tonnes
10. Considerable quantities of vegetables, mainly tomatoes, pepper and onions (Osuniogun and Oludimu, 1986).

Infrastructural Development in the ADPs/ADAPs

S/N	Project	Farm Service Centre	Development Centres	Rural Roads (Kms)	Dams	Boreholes	Wells	Building
.	Ayangba ADP	32	6	1623 improved 891 kms constructed	2	25	-	136
.	Lafia ADP	22	1	838 constructed 110 maintained	-	3	363 constructed 166 maintained	126
.	Bida ADP	59	5	125 maintained 405 constructed	Canals 94kms	-	-	132
.	Ilorin ADP	52	5	165 constructed 100 graded	-	4	-	16
.	Ekiti-Akoko ADP	27	-	80 graded	-	-	-	1
.	Oyo-North ADP	9	1	85 constructed 61 rehabilitated	7	5	145	6
.	Sokoto ADP	81	4	530 built 1,280 maintained	8	1,200	60 tube wells	64
.	Bauchi ADP	87	11	1,427 maintained	84	1,777	38 wells, 542 wash bores	304
.	Kano ADP	168	12	751 maintained	-	1,216	80 tube wells 421 wash bores	115
0.	Borno ADP	-	25	90 maintained	-	-	2 wells	6
1.	Imo ADP	34	-	200 constructed 228 improved	-	-	-	2
2.	Gongola ADP	30	1	32 improved	-	-	-	2
	Total	601	71	5,494 constructed 3,537 maintained	101	3,632	973 Wash bores	908

Source: Federal Agricultural Co-ordinating Unit (FACU), Ibadan

The ADPs recorded tremendous successes since its creation, but the project faced some problems as the World Bank reports indicates:

(i) Incorrect technological package based on sole cropping rather than prevailing mixed cropping.

(ii) Excessive investment in farm service centers resulting in an unwarranted high subsidy on input distribution.

(iii) Too short a period set for phases of the project despite the fact that most aspects of agricultural development are of long-term nature;

(iv) Excessive reliance on expatriate management;

(v) Too rigid adherence to the original appraisal report and targets preventing flexible adjustments in the project in the light of evaluation data and experience gained by the project management.

(vi) Insufficient adaptive research whether in the form of variety trials or on-farm testing of improved agronomic practices.

(vii) Erratic financing regime, given poor state funding of existing projects since 1981 cited in Osun, Ogun, (Oludimu, 1986).

The World Bank attributed the failure of the ADPs to poor structures and funding despite the millions of naira that was spent on the production of some agricultural products like Yam, Sorghum, Millet, Cassava, Maize e.t.c.This efforts have not translated into availability and affordability of these products in Nigeria.

3.4.3 River Basin Development Authorities (RBDAs)

The River Basin Development Authorities (RBDAs) was created in the mid 1970s. It is on record that Decree No. 25 of 1976 created eleven RBDAs. The RBDAs was charged with the responsibility of transforming peasant agriculture in Nigeria through the provisions of institutional and logistic support to boost food production. The activities of RBDAs have been restricted to land development and irrigation of farm lands as well as construction of dams, weirs and surface/underground water facilities. (Obi et al, 2008). Ojo (1991) summarized the following functions of RBDAs:

(a) Comprehensive development of water resources for multi-purpose use, including irrigation and urban water supply;

(b) Control of floods and erosion, and watershed management;

(c) Construction and maintenance of dams, dykes, polders, wells, bore-holes, irrigation and drainage system;

(d) Resettlement of persons affected by their activities;

(e) Control of pollution in water resources system;

(f) Development of fisheries and improvement of navigation;

(g) Mechanized bush clearing and cultivation of land for agricultural production;

(h) Large scale seed multiplication for distribution to farmers

(i) Agricultural processing and

(j) The implementation of rural development projects.

Ogbuagu (1995) noted that financial allocation to the RBDAs has been inadequate or has declined since the late 1980s. The total budgetary allocation to all the eleven RBDAs in 1989 was N241.4million, and it fell to N121.1 million in 1990, a decrease of 49.8 percent. In terms of actual disbursement, it declined from N210.3 in 1989 to only 68.8million or a decrease of 67.28 percent in 1990". According to Abba, et al (1985) "between 1976 and the end of 1982, the RBDAs and their projects gulped about N2.78billion. This is entirely untrue. The project is capitalist in nature that promotes the interest of the imperial powers, international finance capitals, bureaucrats and merchant capital but not the small farmers. This phenomenon has posed serious danger to agricultural productivity and food security in Nigeria.

3.4.4 Operation Feed the Nation (OFN)

Operation Feed the Nation (OFN) was initiated by the former military Head of State of Nigeria, General OlusegunObasanjo on 21st May 1976. In his speech he declared that:

The aim (of OFN) is to make this nation self-sufficient in basic food needs, during this cropping season. It was also hoped that the operation will impact to the whole country a new sense of purpose and bring home to everyone the need for self-reliance … In the past few years, the country has witnessed alarming decline in agricultural production. Government has had to import increasing quantities of a variety of food items from abroad. Prices of foodstuffs have galloped. To make matters worse, young men and women have been drifting from rural areas into the cities in unprecedented numbers, leaving behind them old men and women who cannot be expected to meet the growing needs of the country for food.

The main objectives of the OFN were as follows:

(a) To mobilize Nigerians towards ensuring self-sufficiency and self-reliance in food production and raw materials in order to reflect the true sovereignty of the nation.
(b) To utilize the abundant resources-land, water and manpower of this country towards the efficient production of crops and livestock which are required by the indigenes of this country for healthy growth and development.
(c) To inspire Nigerians to recognize the centrality of agriculture and also to see it as a noble economic enterprise.
(d) To encourage youths to take to agriculture instead of migrating to the cities in search of jobs that are most often non-existent.
(e) To discourage the importation of food and guarantee all farmers and growers reasonable shares of the nation's wealth in exchange for their labour and capital investment.

As part of its implementation strategies of OFN, the Federal Government in its 1976/77 budget provided the following incentives to enhance food production in Nigeria.

(a) A five-year tax holiday for agricultural production and processing which use a substantial portion of local plantation.
(b) Establishment of an agricultural credit guarantee scheme to provide guarantee for agricultural loans granted by commercial and merchant banks.
(c) Duty-free importation of tractors, machinery and equipment used solely for agriculture.
(d) Duty-free importation of raw materials for manufacture of live-stock feeds;
(e) Subsidized fertilizer scheme; and
(f) Subsidized tractor-hiring services (Musa, 1979).

In its strive to achieve full implementation of the OFN programme, the federal government of Nigeria in 1978/79 budget incorporated the following incentives.

(a) Preferential treatment for agriculture in the credit guidelines given to financial institutions.
(b) Additional investment allowance of 10 percent on capital expenditure incurred on agricultural production;
(c) A limitless tax-holiday until all cumulative losses incurred in agricultural production are off-set against future profits;
(d) Special tax exemptions on interest on loans granted to aid investment in agriculture; and
(e) Capital allowance for equipment leasing to agriculture (Musa, 1979).

Thus, the government established organizational structures at the Federal, State and Local Government levels. The rationale behind this was to ensure full participation of all and sundry "so as to help the nation attain self-reliance and self-sufficiency in food production". The federal government also provided and distributed fertilizers; engaged in the importation and distribution of farm implements such as tractors, as well as embarking on projects like livestock and fishery development all aimed at the production of more food. Despite all this government support and inceptives provided to boost agricultural production through OFN, the result has not been encouraging. The OFN agricultural policy is a capitalist project aimed at promoting the interest of the departing colonial masters, and comprador bourgeoisies and not the peasants.

3.4.5 Green Revolution

The Green Revolution Programme was launched in April, 1980 by the Civilian Administration of President Shehu Usman Aliyu Shagari. The Green Revolution Agricultural

strategy was a replication of the Obasanjo Operation Feed the Nation Programme whose primary objectives was "to achieve agricultural self-sufficiency through the stimulation of production for domestic food needs and raw materials for export and in so doing enhance rural development in Nigeria". Thus, the primary objectives of the Green Revolution were:

i. Making Nigeria self-sufficient in basic food need;

ii. Educating the masses of the people on the need for self-reliance and self- sufficiency in food production;

iii. Improving the poorly co-ordinated past agricultural policies and programmes with a wholistic approach in which existing social, economic, institutional and organizational factors inhibiting rapid agricultural development are identified and tackled in an integrated manner;

iv. Diversification of the country's sources of foreign exchange through increased agricultural export;

v. Improvement of the socio-economic welfare of the people;

vi. Provision of gainful employment for the majority of the rural population in order to arrest the undesirable impact of migration;

vii. Production of raw materials for local agro-based industries;

viii. Stimulating a sense of pride in agricultural activities

ix. Encouraging balanced nutrition and thereby producing a healthy nation; and

x. Mobilizing the abundant land, water and manpower resources of the country towards the efficient production of food crops and livestock both for internal consumption and export (Federal Ministry of Agriculture, 1984:64).

It is on record that Green Revolution was fundamentally an agricultural strategy aimed at accelerating agricultural development as well as rural development. The programme involves the use of imported agricultural inputs such as farm tractors, irrigation pumps and facilities, agro-chemicals and equipment, improved seeds, animal feeds, and fishing inputs such as outboard engines, fishing net, the construction, maintenance and rehabilitation of infrastructural facilities such as bridges and culverts, roads, housing, power and water supply. It encouraged private sector to actively participate in the overall drive for agricultural revolution and to increase investment in this sector (Tijani and Williams, 1981).

The Green Revolution involves massive introduction of farm mechanization and application of insecticides, pesticides and other chemicals, the policy makers believes that modern technology could solve the problems of food shortage yet in countries like Bangladesh, and India where this Green Revolution was adopted food shortage has been their common problem. Green Revolution unlike other agricultural development strategies adopted in Nigeria are yet to solve the problem of food crisis and rural underdevelopment. Agricultural policies in Nigeria from independence to date have some kind of appeals to the ruling class and the merchant capital. These classes of people see this programme as an opportunity to form alliance with the international finance and capital and to expand production base and accumulate more capital. The implication here is that, it led to increase capitalist relation of production and the differentiation of the peasantry into the rural proletariat and bourgeoisie respectively.

3.4.6 The Directorate of Food, Roads and Rural Infrastructure (DFRRI)

The Directorate of Food, Roads and Rural Infrastructure (DFRRI) was created in 1986 by the President Ibrahim Babangida military government. DFRRI was "charged with the development of a national network of rural and feeder roads in order to make life better for rural dwellers whose occupation is predominantly farming". DFRRI had the following objectives:

i. To improve the quality of life and standard of living of the majority of the people in the rural areas
ii. To use the enormous resources of the rural areas to lay a solid foundation for the security socio-cultural, political, economic growth and development activities of the rural areas with those of the Local Government Areas, the states and the Nation; and
iii. To ensure a deeply rooted and self-sustaining development process based on effectively mobilized mass participation, starting from the grassroots and encompassing the entire nation thereafter (CBN, Annual Report and Statement of Accounts, 1986:28).

DFRRI was also mandated to engage in rural water supply and electrification. In other to achieve all these set objectives, the programme was under the control of the office of the President with branches established in all the states of the federation. The programme received huge federal government financial allocations for the implementation of its assigned activities. For example, it was allocated a total sum of N500 million (1986), N400 million

(1987), N500 million (1988); and N300million (1989) for capital expenditure only for the indicated years (CBN, Annual Report and Statement of Accounts, 1989:23).

DFRRI was meant to provide feeder roads, electricity, and potable water and toilet facilities for the rural dwellers. It was observed that one of the major reasons for the failure of all these agricultural policies was that they were based on faulty philosophy. The peasants are not involves in the formulation of this policy, their interest are not recognized.

3.4.7 National Special Programme for Food Security (NSPFS)

The National Special Program for Food Security was launched in Nigeria by the Food and Agricultural Organization (FAO) in 1994. The Nation-wide SPFS was developed by Joint Consultative Committee (JCC) comprising government and FAO officials as a follow-up to the November, 1996 world food summit.

The programme was first implemented in Kano state on a pilot bases for the period 1994-1996. But the NSPSFS project was later implemented in 109 sites throughout Nigeria (3 sites per state according to senatorial districts and one site in FCT). The programme was aimed at assisting low income food deficit countries to improve their house hold and National Food Security through a rapid increase in productivity and food production on an economically and environmentally sustainable bases through the reduction of year-year variability in Agricultural production and by improving people's access to food. It was observed that there are temporal and spatial variations in food supply especially in the rural areas of Nigeria which could be ameliorated through a combination of carefully targeted production increases, integrated with nutritional education and related measure to address micro-nutrient deficiencies.

Other objectives of National Special Programme for Food Security (NSPFS) are to:

i. Assist farmers in achieving their potential for increasing output and productivity and consequently their income
ii. Strengthening the effectiveness of research and extension services in bringing technology and new farming practices developed by research institutes to farmers and ensuring greater relevant of research to the practical problems faced by small farmers.
iii. Concentrate initial effort in pilot area for maximum effect and ease of replicability.
iv. Improved upon experience gathered internationally for broader out-look and approach

v. Consolidate the gains from the now closing external loan assisted projects for continuity
vi. Compliment and refine the on-going efforts of Government in the promotion of simple technologies for self-sufficiency and surplus production in small scale rainfed and irrigated farming.
vii. Train and educate farmers in the effective utilization of available resources and facilities to produce food and create employment.
viii. Utilize international experience for farming practices in Nigeria to maximize use of existing facilities and knowledge to spread benefits to wider areas.

However, the National Special Programme for Food Security has different components and these components are:

I. Water management component involving irrigation drainage practices
II. Intensification component including crops production, production of improved seeds and seedlings, farm mechanization, storage/preservation of agricultural products, rural credit, agro-forestry, processing and marketing of Agricultural commodities, humannutrition, sanitation, hygiene and health care and research and extension.
III. Diversification component which include animal production, husbandry, health care and aquaculture.
IV. Constraints analysis component involving needs assessment.

3.4.8 Agricultural Policy under the National Economic Empowerment and Development Strategy {NEEDS}

Following the dominant role agriculture plays in the nation economy in terms of food security, provision of industrial raw materials, income generation and employment opportunity the President Obasanjo NEEDS programme contains some policy thrusts that are geared towards developing the agricultural sector in Nigeria. Government intends to increase investment in food security and reduction of poverty. The main policy thrust of agriculture under the NEEDS programme include the following:

a) Provide the right policy environment and incentives for private sector investment in the sector. Implement a new agricultural and rural development policy aimed at addressing the constraints in the sector.
b) Foster effective linkages with industries to achieve maximum value-added and processing for export.

c) Modernized production and create an agricultural sector that is responsive to the demands and realities of the Nigerian economy in order to create more agricultural and rural employment opportunities, which will increase the income of farmers and rural dwellers.
d) Reverse trend in import of food, (which stood at 14.5% of total imports at end of 2001), through a progressive programme for agricultural expansion. The government is committed to reducing the growing food import bill to stem the rising trade imbalance as well diversify the foreign exchange earning base.
e) Strive towards food security and a food surplus that could be exported.
f) Invest in improving the quality of the environment in order increase crop yields.

Targets

To restore agriculture to its former status in the economy, NEEDS sets the following targets

1) Achieve minimum annual growth rate of 6 percent in agriculture;
2) Raise agricultural exports to $3billion by 2007. A major component of which will be cassava;
3) Drastically reduce food imports from 14.5% of total imports to 5% by 2007;
4) Develop and implement a scheme of land preparation services to increase cultivable arable land by 10% annually and foster private sector participation through incentive scheme.
5) Promote the adoption of environment friendly farming practices.
6) Protect all prime agricultural lands for continued agricultural production.

Strategies

To achieve these targets, the following strategies must be employed:

1) Vigorously implement Presidential Initiative on Cassava, Rice, and Vegetable oil, Sugar, Livestock, Tree Crops and Cereals. Under this initiative, Nigeria hopes to generate as much as N3 billion a year from agricultural exports.
2) Take advantage of the various concessional arrangements provided by the WTO, EU-ACP, and the AGOA, NEPAD and the huge West African market.
3) Strengthen agricultural research, revitalizes agricultural training and streamline the extension delivery system. Involve non-governmental organizations (NGOs) and

opinion leaders in extension delivery by building capacity and promoting improved technologies that meet farmers.

4) Review the agricultural input supply and distribution system with a view to developing an effective and sustainable private sector-led input supply distribution system.
5) Promote integrated rural development involving management. Agricultural and non-agricultural activities, including through the provision of physical infrastructure such as feeder roads, rural water supply, rural communications.
6) Encourage states to develop model rural communities and farm settlement, providing them with feeder roads, boreholes, vocational training, simple farm tools and equipment, alternative energy sources and communication centers to provide a wholesome life to reduce the incentives to migrate to urban arrears.
7) Adequate capitalize the Nigerian Agricultural, Cooperative and Rural Development Bank (NACRDB) to provide soft agricultural credit and rural finance. (NACRDB has been restructured and its mandate expanded to include full financial intermediation)
8) Refurbish the eight functional silo complexes and phrase completion of the remaining ones to improve and increase the capacity of the food reserve programme as a step towards achieving food scurity. These facilities would be leased farmers on an individual or group basis
9) Promote joint-venture private sector-managed multi-commodity development and marketing companies to guarantee remunerative prices for farmers, stabilize consumer prices and provide alternative market for farm produce through buyer-of-last resort mechanism.
10) Support all season farming by promoting rain-fed and irrigated farming with an emphasis on fadama agriculture.
11) Implementation the programme for the massive production of tree crop seedlings.
12) Increase crop productivity through sound environmental rehabilitation and management.

Unlike other agricultural policy or programmes in Nigeria, the NEEDS projection and target, one can conclude that it policy had failed to achieved the objectives set for it; (the NEEDS document sets 2007 as the optimal year for achieving its objectives). The country is still far away from attaining self-sufficiency in food production. (Obi, 2008). It is noted “that agricultural policies in Nigeria have remained the same. The only difference is in the date and the name they are variously called. One major feature among those policies is that they are designed to favour capital”. The interests of the rural dwellers or peasants are not recognized;

they are placed on the disadvantaged position and could not reap fruits of their labour. Thus, agricultural policies in Nigeria are influenced by the international finance capital, World Bank and International Monetary Fund which are agents of imperialism. Mechanization of agriculture only improves the technical aspect of production not the condition of the peasants.

3.4.9 The Agribusiness Strategy

The strategy of agribusiness was adopted to solve the problem of world food crisis; it was argued that the race between food production and population growth can only be won if backward agricultural system in the world is thoroughly modernized in line with the capitalist world's most efficient and productive food system; namely agribusiness.

It was also argued that in view of the decline of agricultural production in the third world and the food crisis which led to famine in many areas of the underdeveloped world in the early seventies there is need to revolutionize the system of agricultural production in the third world not relaying on foreign bilateral or multilateral aid alone, but the developing economies have to mobilize their resources to ensure the success of agribusiness strategy. However it is unfortunate that the agribusiness strategy is a capitalist project, which encourages the exploitation of the peasants by the state; and also serves as a means of enhancing the magnitude of the world capital accumulation by re-structuring the basis of the independent relationship between the center and periphery of the world capitalist system. The government is subsidizing food production by agribusiness firms, in form of subsidies for production oriented schemes with massive purchase of agricultural inputs and machinery from the input manufacturing corporations.

Thus, the nature farm agribusiness linkages in Nigeria can best be understood within the context of the Nigerian economy; the supply of raw materials to the agro-industrial processing and manufacturing sector is a primary role of agriculture. This role also facilitates the other traditional roles of agriculture as a food supplier, provider of employment opportunities and income generation and a contributor to foreign exchange earnings through exports. In Nigeria, the rate of achievement of the linkage between agriculture and industrial sector has remained very tardy. This is attributed to unhealthy international economic relations arising from the integration of the developing economy to the world system of capitalist appropriation, globalization and technological innovation in the process of production dismantles the barriers to mobility of capital, trade liberalization and capital market and lopsided agricultural policies weaken the emerging economies to unprecedented

structural and systemic crisis of the new world order that is involving under globalization and international capitalism.

Agribusiness strategy is a capitalist project intended to oil the wheel of imperialism and enrich the holders of state power in Nigeria. The decision of the Kwara state government to invite white Zimbabwean farmers to Nigeria in 2004 does not serve the interest of the Nigeria farmers but the ruling class. Attesting to this fact in 2008, another group of more than 40 Zimbabwean farmers were welcomed into Nigeria. These commercial farmers were given farm lands, subsidized loans and ongoing upgrade of farming infrastructure, such as irrigation. They have since started commercial farming in several parts of Kwara state in Nigeria. The success story of these farmers is one of the key factors that have encouraged the Government of Nigeria to announce plans to revive agriculture as the bedrock of its economy. Nigeria's new agricultural initiative comes as it tinkers with its vision 20:2020 project: to join the top 20 economics in the globe by 2020 (www.dynamicexport, com.au>countries).

Agribusiness is a large scale and industrialized food production. More than 70 percent of all businesses operating in the country are agribusiness concerns primarily in the hands of the private sector. In a recent survey, NISER (1990) observed that 41 percent of agro industries are sole proprietorships, while another 41 percent are private limited liability companies. These agribusiness enterprises include the whole gamut of operations in the agricultural production, processing, distribution and consumption spectrum. Agribusinesses enterprises in Nigeria can be classified into four major groups: farming input supply companies, producing farm firms, food processing agribusiness firms, and food marketing and distribution agribusiness organizations Twenty-one types of agribusiness firms can be identified for Nigeria within these four categories. (www.fao.org/docrep/008/9578eoc.htm).

Agribusiness firms are scattered all over the country but are concentrated in three main industrial clusters in Nigeria: Kano, Kaduna, Jos in the north; Lagos, Otta, Ibadan in the south west and Port Harcourt, Aba, Nnewi, Onitsha in the south east. In general, the Lagos, Otta, Ibadan axis accounts for 44 percent of the registered firms and roughly 52 percent of the employment. Based on the average number of employees per firm, the largest firms are also located in the Lagos area. While most of the sector is made up of small-scale enterprises (about 60 percent of the firms have between 20 and 49 employees), these account for 12 percent of employment. With a few exceptions, firms with more than 500 employees provide

the bulk of sectoral employment. As a whole, they account for 53 percent of total employment in the manufacturing sector (Marchet, 2001).

The extension of agricultural technologies to farmers has been the primary focus of the State Agricultural Development Programs in Nigeria. Their efforts are however complemented by the activities of NGO's such as Sasakawa Global 2000, private companies such as Shell Petroleum Development Corporation, Nigerian Agip Oil Company, and some organized farmer associations such as Farmers Development Union (FADU). Private agribusiness firms also provide agribusiness activities usually related to specific input or product markets. Of significant in this respect is the Nigerian tobacco company. The extension activities of these companies (including the oil companies) are highly rated but cover a very small share of farmers and in the case private companies; the extension is focused on specific inputs and products (www.fao.org/docrep/008/9578eoc,htm).

Farm input supply businesses comprise: agricultural chemical input suppliers of fuels, fertilizers, pesticides and herbicides seed and feed concentrate suppliers; agricultural machinery and equipment suppliers; automobile, tube, tyre and foam manufacturers; credit and veterinary service suppliers. The producing farm firms are crop producers and livestock producers who are farmers scattered all over the country. Food processing agribusinesses in Nigeria include food and fruit juice canners; manufacturers of beer, soft drinks, cocoa drinks coffee, and tea; producers of confectionary sugar sweets, chocolate, cakes, biscuits; tobacco processors and/or manufacturers; meat processors; wood processors and furniture makers and distributors, paper millers and tissue paper manufacturers; leather and footwear manufacturers; food packaging and cartons manufacturers; cotton processing, weaving and textile companies; food commodities in which Nigeria has a comparative production advantage. A possible exception is the beer industry whose linkages with cereals production are relatively and hence their employment and income effects could be relatively higher than others (www.fao.org/docrep/008/957eoc.htm).

However, agribusiness is a capital intensive venture. It requires a lot of finances, incentives, farm inputs, seed supply, contract farming, distribution, processing, marketing, retail sales and even researches. The incentives on offer include five-year holiday, full ownership, co-financing and land acquisition among other infrastructures. Co-financing options include the 40:30:30 funding formular: new foreign investors provide 40 percent of the total take-off capital needed for investment; the Nigerian government is mandated to

provide 30 percent of the capital, while the remaining 30 percent will be sourced from a government-nominated bank in Nigeria. This new co-financing format is designed to minimize capital outlay and encourage foreign investors for a limited time. The World Bank through the International Donor Agency will commit an additional US$150 million to the development of commercial agriculture in the states of Cross Rivers, Enugu, Kaduna, Kano and Lagos. The project is expected to spread within five years (www.dynamicexport.com.au>country).

The integration of Nigeria agriculture into agribusiness which is the essence of government policy has some negative effects on society and economy. The River Basin development projects and integrated rural development projects have led to massive displacement of the peasantry or small holders and strengthening both the power and resources bases of the progressive farmers.

Agribusiness strategy therefore aimed at verticality integrating agriculture into capitalist production relations and liquidating the peasantry by proletarianising them in the process. This strategy in Nigeria has led to massive misplacement and the marginalization of the peasantry by alienating them form the land. This alienation takes the form of federal, states and local government acquisition of land for various public and private projects and large scale privatization.

3.4.10 National Root Research Institute, Umedike

The above institute focused more on foreign acquisition through importation and local collections of cassava and other root crops into the country. The institute is obliged by the Federal Government of Nigeria to carry out research on root crops farming and development. The institute also carries out evaluation studies, fertilizer calibration, improvement and development of agronomic production packages. Sugar Beet and Other Root Crops Improvement Programme (SBORC) is one of the seven commodity crop improvement programmes in the institute. SBORC came into existence in March 2000 with the responsibilities of developing the industrial and food value potentials of Sugar Beet, Livingstone potato and Hausa Potato (Kadiri, 2008). The impacts of the research institution could not be felt by ordinary farmers rather it is a state project that guaranty, maintain, and sustain the condition of capitalist accumulation by the manager of the state and the international institutions.

3.4. 11 International Institute of Tropical Agriculture (IITA), Ibadan

The IITA, Ibadan has the mandate of all African Heads of State for cassava development in the region. The IITA expanded its scope to include the market-driven technology transfer and commercialization of its mandate crops, including cassava. The new scope inspired the hosting of the Cassava competitiveness workshop in 2002, the implementation of the pre-emptive management of the virulent form of the cassava mosaic disease and the Cassava enterprise development projects. Currently, three cassava projects are being implemented through the IITA in Nigeria. These are pre-emptive management of the Cassava Mosaic Disease (CMD), Cassava Enterprise Development Project (CEDP) and the Cassava Mosaic Disease (CMD) is used as a strategy mainly along the Southeast flank of Nigeria to checkmate the mosaic disease. This CMD project is funded by the Federal Government of Nigeria, the Niger-Delta Development Commission (NDDC) and some State governments in the country. The Cassava Enterprises Development Project (CEDP) is primarily established to support micro and small-scale agro processing activities in the cassava enterprise. The CEDP is funded by the USAID, SPDC and IITA (Kadiri, 2008).

The institute right from inception to date could not live up to expectations of ensuring food availability and proper agricultural productivity in the country. This is because the International Institute of Tropical Agriculture is a capitalist establishment created by the state with the support of the World Bank and other credit international institution to promote and sustain capitalist commodity production which promotes production for exchange value and not for consumption. This indeed compounded the problem of food insecurity and rural underdevelopment in Nigeria.

3. 4.12 Root Tuber Expansion Programme (RTEP)

The Root Tuber Expansion Programme is funded by the federal government of Nigeria, state governments and the IFAD. The RTEP started initially as Root and Tuber Multiplication Scheme but due to increase in production, RTEP has included the harvest component. The programme covers yam, potato and cocoyam (Kadiri, 2008). The primary purpose of RTEP is to promote the production of root crops in order to solve the problem of food insecurity and rural poverty in Nigeria.

3.4.13 National Cassava Policy

It is on record that the primary focus of the new cassava policy in Nigeria is to provide food security, increase output, incomes and well-being of the direct producers of cassava.

Government regulation of including 10% cassava on all bread produced in Nigeria is expected to generate six million jobs from up and down stream, and 37 small and medium enterprises as well as generate N635billion or $5billion income yearly (Ugeh, 2007). Expansion of cassava production has been relatively steady since 2000 with an additional push between the years 2000 and 2002 due to the release of improved IITA varieties. This expansion is to ensure massive cassava production to feed the emerging cassava industry in Nigeria.

President Olusegun Obasanjo initiated the national policy on cassava production in Nigeria in 2002. He constituted a national committee on cassava production and export aimed at addressing issues relating to increase in yield and production, post-harvest management, and promotion of local and industrial utilization of cassava. (Thisday, 9th August, 2000). Adamu (2002) noted that President Olusegun Obasanjo wishes to increase food security and also export $1billion US Dollar worth of cassava products in the next three years. The primary objective of the Nigerian cassava policy or initiative includes the expansion of primary processing and utilization in order to absorb the national cassava production glut, identify and develop new market opportunities for import substitution and export so as to stimulate an increased private sector investment in the establishment of export oriented cassava industries (Cassava Initiatives in Nigeria: 2005). Hence the new policy aimed at shifting cassava farming from being a food crop to a commercial crop.

The Government Policy of using composite flour of 10% cassava and 90% wheat for bread is aimed at conserving foreign exchange and encouraging industrial utilization of cassava, (Thisday 10th January, 2005). The new policy is with effect from January, 2005. Currently, the Nigerian Government is believed to be spending about US $400 million on wheat importation annually, to meet local demand of flour by the baking industry in Nigeria. It is believed that with 10% cassava substitution, the government will save about US $40 million, which can be injected into the Nigerian cassava industry.

In the light of this however, Ihimodu (2006) identifies the following objectives of the initiatives:

- **i.** Increased cassava production and export with target of 150 metric tons per annum by 2006 and an earning of about $5billion in 3years.
- **ii.** Increased rice production and export with target of 6 billion metric tons of milled rice per annum by 2005 and produce surplus for export by 2007.

iii. Increased vegetable oils production significantly within 3 years;

iv. Increased annual protein intake by 50% within 3 years

v. Expanding tree crop development (cocoa, oil palm, date palm, rubber, gum Arabic, cashew, coffee etc) to meet local consumption and surplus for export;

vi. Increased fisheries and aquaculture at 2 million tons of fishes and 2 billion of fingerlings within 3 years.

The Nigeria new cassava policy is a pledge that raises the expectation of the Nigerian cassava producers in terms of food security, employment opportunity and income generation. It is believed that cassava will serve as food for about 500 millions people living within the tropics (Samuel, 2005). Available record has shown that Nigeria has not fully harnessed her cassava potential even as they are ranked as the leading world producers (CBN, 1999). And the new cassava policy has not actually incorporate the overwhelming interest of the primary producers rather the policy internalized the interest of the state, merchant capital and the bureaucrats. This position is line with Ake (1981) who notes that capital uses the state to regulate the condition of the peasant's production by making laws about who might produce what, imposing development programmes which put the peasant in the position of using fertilizers and different techniques for tools. The process of compelling the use of these inputs and techniques was ostensibly to help the peasants, but in fact aid the integration of the peasants into exploitative commodity relations; imposing laws which standardized products and production relations. While the policies aimed at transforming agriculture took place, they were not aimed at battering the social condition of the peasants. He maintained that, agriculture remained the backbone of the colonial and post-colonial economy. But these contributors to the finance of the colonial and post-colonial state before the oil money were still not involved in the making of agricultural policies such as Operation Feed the Nation and the Green Revolution etc. The entire period was marked by the imposition of agricultural programmes on the peasants and their fate was at the whims and caprices of the colonial and post-colonial ruling class.

3.5 Nigeria Cassava Transformation

From 1961-1971 in Nigeria, government policy focused on industrial crop (cocoa, cotton, groundnut, oil palm and rubber) production for export as a source of government revenue and foreign exchange. Agricultural policies undergone serious reorganization during the years of structural adjustment programme in Nigeria. In the mid-1980s, cassava emerged as an important crop in the national effort to replace imported food with domestic production. In 1984, the National Coordinated Research on cassava project was set up to coordinate the

on-farm adaptive research on cassava by the National Accelerated Food Production Programmes, Agricultural Development Programmes, Research Institutes and Universities. In 1985, the ADPs were established in cassava producing states to carry out on-farm evaluation, provide extension services to farmers and multiply and distribute the Tropical Manihot Series (TMS) stem cuttings and seeds of other crops.

In 1986, the cassava programme of the National Seed Service was established with US $120 million grant from International Fund for Agricultural Development to multiply and distribute the stem cuttings of the TMS varieties free to farmers (World Bank, 1993). The cassava planting stem cuttings are bulky and perishable. They dried up within a short period after harvest. The diffusion of the TMS varieties in Nigeria was facilitated by CR1, the World Bank IFAD, Churches, NCGA (Nigerian Cassava Growers Association) etc. (World Bank, 1993).

In the 1980s in Nigeria, cassava as a cash crop for urban consumption was sped up by the use of the mechanized grater for preparing garri after the Nigerian government invested in measures to promote the cassava transformation. Since the grating task is mechanized, peeling is now the most labour intensive task followed by the roasting stage in garri preparation.

Cassava is traditionally consumed by processing the fresh roots into garri, fufu, and flour (Adebayo, 2003). Traditionally, cassava was pounded in a mortar with a pestle to make garri. Later, artisans developed a manual grater in the form of a sheet of perforated metal mounted on a flat piece of wood. But the efficiency of the hand grater was low because of its high labour input. In the 1930s, the French introduced mechanical graters in the Republic of Benin to teach farmers how to prepare garri at tapioca for export markets (Jones, 1959). During that same decade in Nigeria, local artisans introduced and modified the mechanical grater (Adegboye, 1970). With the introduction of mechanical graters to prepare garri, cassava is consistently being produced and processed for sale in both the rural and urban centres in Nigeria.

Cassava processing in the rural areas in Nigeria has undergone serious transformation. This can be found in the kind of technologies used in cassava processing system. Such equipments like cassava grater, screw press, frying machine, steel frying pot, mechanical pillars among others are used for the processing of cassava into cassava flour, cassava starch and animal feed. The methods of making cassava flour made up of peeling and washing, grating, dewatering, pulverizing, drying and milling.

Cassava transformation strategy seeks to create a new generation of cassava farmers oriented towards commercial production and farming as a business and to link them up to reliable demand either from processors or a guaranteed minimum price scheme of the government. Thematic focus of the cassava transformation strategy is turn the cassava sector in the country into a middle player in the local and international starch, sweeteners, ethanol and dried chips industries by adopting improved production and processing technologies; and organizing producers and processors into efficient value- added chains.

The adoption of cassava grater, grinder, mechanical peeler and other improved technologies in cassava processing predominate in Nigeria. In the early 1970 in Nigeria, village smiths, welders and mechanics have over time refined the mechanized grater originally introduced via the Benin Republic. They make these mechanize grater with old engine and scrap metals, at cost ranging from US$200 to $500 (Nweke, 2004). Most of the graters are owned by village entrepreneurs and operated by young men who provided grating services to small holders for a fee based on the quantity grated. The quality processed for a customer can be as small as one kilogram or as huge as several tons. The processors remain at the back and call of farmers at any hour of the day. In some villages, the graters are located in the market. In other villages, a grater is mounted on wheels and moved to the field or the homes of farmers who request the services. Roadside mechanics and welders provide maintenance services for the grater at any hour of the day (Nweke, 2004).

The adoption of modern technologies in cassava processing confirms the importance of the presidential initiative on cassava which seeks to facilitate industrial use of cassava to diversify the economic base of the nation and promote foreign exchange earning opportunities from the export of high quality cassava products from Nigeria. (Adebayo, 2009).

Thus, the adoption of TMS varieties in Nigeria has propelled the production and processing of cassava in Nigeria. The government policy on cassava has contributed to rapid diffusion of TMS varieties in Nigeria. Also the rapid diffusion of TMS varieties has led to the emergence of mechanized grater as the mechanical device for easy processing of cassava into finished products in various cassava producing communities in Nigeria.

3.6 Action Plan for Cassava Transformation in Nigeria

Realizing the importance of cassava government had made great efforts in recent times to transform the production of cassava in the country. To fully utilize the potentials of cassava, there is the- urgent need to- revolutionize the method of cassava production and how

the products can- be exchanged or marketed in the country through a value-added chain developments philosophy. The value-added chain approach requires that the cassava initiative will be driven by the private- sector with support from the public sector.

The action plan for cassava production in Nigeria includes the goal objectives, expected outputs and time-line as well as tentative budget.

a. Goal

To increase income by at least US$450 million every year of 1.8 million farm families and to add 1.2 million jobs to the Cassava Sub-Sector in Nigeria through doubling of production, processing and marketing of Cassava in the Cassava growing belt of Nigeria over a period of four years.

b. Objectives

1. Link demand for cassava-based products in the industrial, export, and traditional food sectors to reliable supply by an introduction- of a package of improved production, supply chain management, farm level processing, favourable policies and advocacy with end users.
2. Raise productivity through the demonstration and adoption of improved production technologies to clusters of fanners and the establishment of a network of Agro-chemicals to supply the- needed inputs of fertilizer, stern cuttings of improved varieties and herbicides.
3. Build around farm clusters and market institutions for long term sustainable development of Cassava sector through the establishment of a Cassava Market and Trade Development Corporation (CMTDC).
4. Implement government policies that incentivize use of Cassava for import substitutions and create inputs markets by working closely with the Federal Ministry of Agriculture, Finance, Commerce and National Assembly.
5. Continually monitor and evaluate progress to identify the most promising interventions for continuous improvement of strategies to reach the end goal.

c. Expected Outputs

1. Strong value-added chains of starch, Sweeteners, dried chips, high quality gari and fuel ethanol in Nigeria.
2. A doubling of average Cassava productivity from 12 to 25 tonlha in- target clusters by 2044.
3. Generation of 1.2 million jobs in the rural areas of Nigeria over the next four years of the program.

4. An increase income of 1.8 million participating farm families by US$450-every year.
5. Strong market institutions established for long terni sustainability of the Cassava sub-sector

d. Time-line-Four (4)-years

e. Budget summary, tentative: NON 7,767,00(1,000

In order to meet the objectives of the action plan for cassava transformation in Nigeria, a total of ten (10) working groups were formed along their leaders at the preparatory session of the action plan. The ten working groups are:

1. High Quality Cassava Flour - Peter Bolt (DATC&) and Prof Sanni (UNAB)
2. Starch- Tim Prewitt (MARKETS->
3. Dried chips - Dr. Oyebanj-i (NPAFS-)- and Dr. Efuntoye (RTEP)
4. High Quality Gari - Eng. Tony Egba
5. Fuel Ethanol - Chief Awoniyi
6. Baser-line survey - Dr. Odeyemi (EMANR)- and Dr. Zubairit (NPAFS)
7. Policy Review and reform and Guaranteed Minimum Price Scheme for Cassava — Prof. GB Ayooia/Dr. M.I Lawal (NFRA).
8. Seed system and fertilizer tirals — Dr. Richard Okechukwu
9. Breeding the varieties tailor-made for specific value-added chains - Dr. Emma Okogbenin
10. Securing buy-in from State Governors, Local Government and Civil Society - MrsToyinAdetunji

At the end of the preliminary section of the working group reports, it was proposed that:

G(a) High Quality Gari: They proposed for:

- Establishment of National Agency for Gari
- Identification of major stakeholders
- Classification of Gari being produced and standardized based on their production areas.
- Organize workshop for Gari processors
- Provide Guaranteed Minimum Price
- Work on packaging materials with standard measurement
- Work with breeders to come u with varieties that will give profitable quality Gari
- Formation of Gari teams in states

- Work with breeders in areas of peeling to give varieties that have uniform tubers and less peels
- Packaging of Gari for attraction

G(b) Based-line Survey

The group highlighted the activities plans as

- Review all work done in Cassava before (Desktop)
- Have discussion forum with actors. producers, processors- and. marketers.
- Work with target groups like, farmers, community processors, technical staff, industrial processors, input dealers, state government, ADP, NRCRI, IITA, Universities and Institutions.
- Conduct of TOT on different areas of Cassava.

G(3) Dried chips group

The group proposed the following prian of activities.

- Selection of interested youth
- Have intensive survey of production, processing and marketing.
- Different chipping machines- should be evaluated
- Research work in area of peeling and chipping sizes
- Establishment of control laboratory
- Evaluation of quality control of the chips types as required by different users
- Formulation of farmers clusters areas
- Strengthening of Extension Services in cluster areas by providing 2 EM and I SMS knowledgeable- in Cassava
- Establishment of 2600ha Cassava multiplication farms
- Provision of 366,000. its of herbicides
- Internal markets for Cassava chips should be exploited by substituting maize with Cassava for animal feeds.

G(4) Policy Reform Group

- To produce a bill to key Cassava transformation plant into implementation arts
- Produce pricing policy as regard to Cassava products
- Other relevant policy measures statement
- Made government to- declare a policy on Cassava to- make it different
- Policy should capture specific purpose, element of standard, specific role of state and local governments- to- avoid confusion.

- Policy of 10% inclusion of Cassava product in breeds and fuel ethanol- should be a must.
- Wavers in processing equipment
- Capacity building for processors and millers
- Development of policy measures on Cassava market and trade purposely designed for Cassava products
- Accountability of Government in the program
- Ethanol with 10% in the bio final production

5. Seed System and fertilizer Trial Group

- Take up from where the breeder ends
- Provide extension services in area of Agronomy, fertilizer application
- Organize soil testing before fertilizer recommendation
- Collect information on released varieties and local varieties
- Provide seed certification and assurance system
- Produce cutting materials through rapid multiplication farms
- Set up demonstration trials Other activities include
- Collection of available oil maps te target soil fertility in cluster areas
- Fertilizer company should produce based on fertility of the cluster area
- Enhance the capacity of soil testing lab
- Support Agro-dealers
- Conduct fertilizer adoption trials
- Doubling of Cassava yield
- Collaborate with NAFDA, NRCRI, IITA for best varieties.

6. Breeding for Specific Value-added chains

- Tape experience from existing work on Cassava
- Identify Cassava varieties that respond to inputs like fertilizer
- Source materials
- Enhance plant breeding to look at bottle-neck
- Breeding programs should be sited in different production zones of the country
- Breeding programs will be classified
- Conduct of extensive trails on release of varieties that could be used in value-added chains
- Integration of value-added chain into release processes

- Strong programme to include varieties from Asia and North America.

3.7 The State and Marketing/produce Boards

The neo-colonial states are found of subordinating the peasants in the production process. They structured the neo-colonial economy to the satisfaction of its ruling class, the imperial bourgeoisie and its local allies. The state can be assured of international financial support as well as a share in whatever is extracted from the neo-colony.

To consolidate their domination in the production process and control the markets of farm produce Nigerian State introduced the institution of marketing boards. The marketing boards approach to export commodity marketing was adopted in developing countries as a short-time solution to the problem of price instability. The marketing boards in West Africa originated from the wartime West African produce control board, established in 1942; the Nigerian Produce Marketing Company is jointly owned by the State marketing boards. Its main functions are:

(1) To acquire from state boards any kind of produce purchased and sell such produce

(2) To issue instructions to the state boards or their servants agents for the evacuation of produce to port.

(3) To appoint agents for the storage in bulk of palm oil at the port of Export.

(4) To make arrangements for the oversea sale of Nigerian produce.

The original objective of the West African export commodity marketing boards was to cut the link between the prices received by producers and the day-to-day fluctuations of world prices. The marketing boards announce producer prices before the opening of each season; each state marketing board fixes the producer prices of all controlled produce in the state concern; the surplus accumulated in years of high world prices are used to maintain the stable price paid to the producers; over time price stabilization became a subsidiary objective of the boards, which became primary sources of government funds to finance development programs. To obtain large surpluses, the producer prices became totally out of line with the world prices.

Several allegations were levied against the operations of the marketing board in Nigeria. Apart from price fluctuation of the export commodities like cocoa, cotton rubber, groundnuts among others the system has failed to provide incentives to farmers to increase production.

The first report of the 1970/74 development plan posits that 'the indications show that the marketing board system as presently operated discourage increased efforts and production by the farmers. The stagnation in the output and export of some cash crops is attributed to the marketing board system.

To boost agricultural production and remedy the problem of low producer price for export crops which led to the smuggling of cash crops the Nigerian federal government introduced the new producer price policy. The principal objective of the new policy is to increase the production of agricultural exports; 'offer relatively high producer prices to our farmers and encourage them to increase their production of the commodities concerned. The following changes are proposed as part of the marketing board in Nigeria:

(1) The federal government of Nigeria, through a technical committee, will henceforth fix producer prices on a countrywide basis for each commodity.
(2) Export duties on marketing board produce were abolished which should allow the boards to pay more to farmers.
(3) The maximum produce tax imposed by the state marketing boards will be limited to 10 percent of producer prices
(4) The federal government will make good any loss incurred by the states due to the loss of their share of export duties. The federal government will also meet any losses incurred by the boards if the producer price is fixed at a level which results in losses to marketing boards. Thus, in years of poor world prices, export crop farmers will subsidized. There will be no need to withhold part of the earnings in a good year in order to subsidize earnings in years of low world prices.
(5) The Nigerian Produce Marketing Company continues as the central selling organization but it is taken over by the federal government.

Thus, the emergence of the commodity/marketing board is a direct reflection of the simple commodity production where market becomes the primary target of production. The colonial economic policy was geared toward the promotion of cash crops such as groundnut, cocoa, cotton, rubber and among others to meet the need of international capital since the rural economy was integrated into the world capitalist system.

3.8 The Challenges of Nigerian Agricultural Policies and Strategies

From our discussion of agricultural policies in Nigeria it is evident that the country has had good policies and programme aimed at boosting food production, employment opportunity, raw materials, and income generation. The questions here are: why has Nigeria still bedeviled with the problems of food insecurity, poverty and malnutrition despite the fact that the country has not been devoid of good agricultural policies? What then are responsible for this consistent policy failure in developing economy particularly Nigeria? Several factors can be attributed to this problem of agricultural underdevelopment. The major factors are

1. **The Nature of Agricultural policies in Nigeria**

The post-colonial state maintained the exploitative colonial agricultural policies which emphasized cash crop production with little or no modification. This has worsened the problem of agricultural production and food security in Nigeria. For instance the acceleration of peasant surplus extraction by the post-colonial state acted as an incentive to increase production of cash crops to the neglect of food crops. The state policies were designed in the form of establishing plantations, farm settlement scheme, large scale irrigation farming and credit facilities to promote the production of cash crops.

Thus, this emphasis on modernization and export oriented agricultural policies which had their root in the colonial period, led to the structural disarticulation of agricultural production. Export crops which provided 75% of the foreign exchange earnings were of such strategic importance to the politicians and planners that an undue emphasis was placed on their production to the neglect of food crops production just as during colonial era (Olatunbosun, 1975, Sano, 1983).

The policy of the new ruling class was to consolidate the free enterprise development policies of the colonial regime. Peasants were not taken into consideration and food production was not in the priority of government policy (Ake 1981). He further contended that the new ruling class took over power from the colonial masters accepted the capitalist path of development but they did not involve the peasants in agricultural policy formulations or the mobilization of manpower. The utilization of modern techniques was not aimed at improving the quality of export crops to earn foreign exchange for development policies that refurbished the material opulence of the ruling class and their collaborators such as the construction of hotels and casinos. The award of contracts was primarily aimed at getting a

certain percentage. Lavished furnishing of offices was undertaken to the neglect of those social services that were meant to improve the overall social condition of the peasants.

According to Ezedimma (1980), the first National Development Plan 1962-1968 a conglomerate post-independence regionally based attempt to develop a national plan for general development. Agriculture was listed but the emphasis sadly was on commodity crops. The plan enunciated "to increase the production of cash crops for export through farm settlements, cooperative plantation, improved implements such as hydraulic process for extraction of palm oil and a great expanded agricultural extension services. Olatunbosun (1975) noted that the two National Development Plans paid little attention to food production. Analysis of the composition of government on agriculture in the 1962-1968 and 1970-1974 development plans showed that an overwhelming expenditure was devoted to export crops. In the 1962-1968 plan no specific mention was made of food production in the plans of the then Federal Government, nor Western and Northern regions.

The new ruling class lack clear idea about the relationship between mobilization of peasant labour and production activities of this neither labour for the raising of national wealth, nor did they believe that the peasants, the creators of this wealth would become involved in the political process. The regime of the First Republic encouraged the establishment of capitalist farms by individuals. In eastern Nigeria, the region initiated the policy of lending money for this purpose (Nzirimo, 1985). Land speculation became rife during the period. The ruling class of this era did not involve the peasants in policy formulation nor educated the peasants for production, thus neglecting the overall food production (Nzirimo, 1985).

Ezedinma (1980) posited that the military regime, which took over power from the first republic politicians, was not a people's army. The military inherited a nation, which operated a capitalist economy and lack a coherent ideology rooted in the millions of toiling masses. There was no mobilization of the peasants in the production and development policies which were similarly imposed from above. Most of these policies were formulated from abroad or were inimical to the interest of the peasants.

Nigeria suffered severe food shortages in the mid-1970 due to lopsided agricultural policies. This led to the introduction of several agricultural policies to increase agricultural production leading to the emergence of new capitalist farmers. Oculi, (1975) argues that by

the new policy, the state sought to eliminate or reduce the number of small holders and replace them with large-scale state farm and Agricultural Development Projects established by the new policy all tended to encourage the emergence of an agrarian bourgeoisie in Nigeria whose ability to meet the country's food needs could be taken for granted. Lappe and Collins (1977) Posited that programmes of this nature in a developing society tend to encourage the emergence of a new class of capitalist farmers who will tend to dominate the politics of the state and control the rural population.

2. Political Problem

Another noticeable reason for the failure of agricultural policies and cassava policies in particular is the problem of interference and influence. Where policies are made to favour some influential personalities or groups the resultant effect is failure or non-performance. Ikelegbe (1994) argues that policies that are largely influence by political considerations normally make choices largely based on subjective political considerations and not on objective condition.

Also the failure of agricultural policies and cassava initiative inclusive can be attributed to fact that the policies are designed to address the issue of support or devastate political opponent and reward political supporters. Most agricultural policies in Nigeria fail because they were not designed to address the real problems but instead targeted at rewarding people considered to be loyalist of political leaders. The badakoshi agricultural scheme in Nasarawa state fails because it was designed to favour the political class and those considered to be loyalist of the government in power.

3. **Problem of Implementation**

Implementation involved the process of converting human and material input including informational, technical, human, demand and support inputs e.t.c into output in the form of goods and services (Eminue, 2005). The policy makers find it difficult to translate the beautiful and well packaged agricultural policies into action or reality this problems of non-performance or failure of agricultural policies can be attributed to such factors; corruption, nepotism, diversion of public fund to private pocket and misplacement of priority. The real beneficiary of agricultural policies which is the small farmers cannot challenge the state for non-implementation because they are highly illiterate.

3.9 Public Policy and Food Production in Nasarawa State

Nasarawa State is among the six states created on the 1st October, 1996 by the late General SaniAbacha's administration. The state has a land area of 12,000 square kilometers which was excised from the former Plateau State. The state has thirteen (13) local government areas namely: Awe, Doma, Keana, Lafia (which doubles as state headquarters) and Obi in Southern Agricultural zone, Akwanga, Kokona, Nasarawa Eggon and Wamba in Central Agricultural zone and Karu, Keffi, Nasarawa and Toto in western Agricultural zone.

Nasarawa state is one of the major producers of farm produce in the country. It is indeed, an agrarian settlement where extensive farming is being practiced or undertaken by over 80 percent of the people.

The state is located in the North Central zone of the country. It lies between latitudes 7^0 and 9^0 North and longitudes 7^0 and 10^0 East, and share common boundaries with state to the south, Kogi State to the West the Federal capital Territory (FCT), Asija, to the Noeth-West, Kaduna and Plateau State to North-East and Taraba State to the South-East.

Nasarawa state has a climate typical of the tropical zone, due to its location. It has maximum temperature of 811.7^0f and a minimum temperature of 61.7^0. Rainfall varies from 131.73 in some place to 145cm in others.

Nasarawa state has two main seasons which is the dry and wet seasons. The dry season covers from November to February, while the raining season spans from March to October. The state is blessed with fertile soil that is capable of producing different kinds of crop such as groundnut, cashew, melon, Guine-corn, millet, cassava, yam, soya beans, sorghum, mango among others. Cassava is the major crop that is grown and processed wildly in all parts of Nasarawa State.

The crop is cheap to produce, it requires labour only at planting and harvesting and cassava can be transformed into different product such as garri, cassava flour, chips among other to meet the food requirement of the people and increase the income of its growers and the state.

AbdullahiAdamu, the first Executive Governor of Nasarawa State in a seminar presented on November 7, 2002 at a civil reception to mark president Olusegun Obasanjo's official visit to the state.

Nasarawa state is basically a rural state. Agriculture is the mainstay of the people. The state does not make the claims as the food basket of the Nation lightly. Our peasants feed and enrich others but they remain poor and deprived. It finds this unacceptable in this day and age.

The reward of teacher's may be in heaven but we believe that the reward of peasants farmers should be here on earth. The state chose rural development as an informed approach to the empowerment of our people. Government will open up the rural areas, arrest rural-urban drift and bring modern development to the generality of our people, you call them the dividends of democracy, we call them the fruit of a responsible and responsive government".

Infact, Nasarawa state government has committed a lot of resources to promote agricultural production, which is the mainstay of the people. As a 2002, the state government accomplished the following project:

- The establishment of a fertilizer blending plant in Lafia
- The establishment of a livestock ranch at Panda in Kan Local Government Area
- The establishment of demonstration farms to help peasant farmers inibibe modern agricultural methods, subsidization of fertilizer and other farm input by up to 50 percent
- The establishment of commodity trading company to buy excess produce from the farmers to cushion them against the vagaries associated with commerce
- The establishment of food processing cotlage industries in partnership with private investors
- The procurement of new tractors, old ones are rehabilitee, agricultural and solid minerals expositions have also been organized.
- Vaccination of livestock against diseases and acquisition gazatting of grazing reserve in Awe, Keana, Citata, Konva, Assickio and Doma have also been done
- The establishment of farmer's cooperatives which serve as the main plan of the photocopy of increased agricultural production
- The reactivation of extension worker to assist the farmers and encourage them to gradually adopt modern farming techniques for increased holding and yield
- The state government traced and demarcated about 600km of both migratory and trade cattle routes,
- The establishment of agricultural/veterinary input revolving service (AVIRS) to procure and distribute agro-net input at subsidized price
- Resuscitation of hatchery and feeding at the livestock complex to boost the production of poultry in the state

- Collaboration with agricultural institutes and establishment of 33 on – farm Adaptive Research (OFAR) plot and 47 On-Station Trials for the evaluation of technologies suitable for farmers adoption
- The implementation of the root and tuber expansion programme (RTED) through the multiplication and distribution of improved roots and tuber planting materials and improving processing and marketing development with the establishment of 18 hectares of cassava, 2.75 hectares of sweet potato, 1.85 hectares of yam miniset and 1.2 hectares of coco yam farms
- The establishment of cassava processing demonstration centre at Shabu
- The establishment of 100 hectares of rice, 65 hectares of maize, 55 hectares of soya beans, 23 hectares ofgroundnut, 55 hectares of beni-seed and 37 hectares of cowpea seed multiplication farmers across the state through growers
- The state government procured and sold a total of 5,440 litre of agro-chemicals and 32,220 kilogram of improved seeds
- The state government sinks 220 wash bores, distribution of 517 irrigation pumps to farmers and the formation and strengthening of 100 Fadama Users Association (FUA) for the sustainability of the Fadama programme
- The implementation of the federal government funded National special programme for food security (NSPFS) in three selected communities of Doma, in Doma Local Government area, Aricha in Akwanga Local Government area and Karmo in Gadabuke development
- Between 1999-2005 a total of 22,061mt of fertilizer was procured and distributed to farmers at 30 percent subsidy, at a total cost of N693,913,000.00
- The state procures three garri processing machines and their installation at the cost of N125,000 each, totaling N375,000.00, while that ogegusi cost N65,000 for seven totaling N455,000.00
- Nasarawa State Produce Development and Marketing Company ensures good market for the state agricultural produce, both locally and inferentially etc.

CHAPTER FOUR

The National Cassava Policy and Peasants

4.1 National Cassava Policy and its Capacity for Food Security

One of the objectives of the National Cassava Policy is the issue of food security. Cassava has remained one of Nigeria's main staples consumed in both urban and rural areas. In Nigeria, farmers and food processors market five types of cassava products: fresh roots, dried roots, pasty product (commonly called akpu), granulated product (called garri) and cassava leaves. The roots of sweet cassava varieties are eaten raw, roasted, boiled in water or fried. It can also be pounded alone or in combination with other staples such as yam, coco yam, sweet potato etc. Dried cassava can be milled and made into a pasty meal (Fada, 2008).

In Africa, consumption more than doubled from 24 million tons per year in the early 1960 to 58 million tons per year in the early 2000s, after accounting for waste (Nweke, 2004). The large increase in the total cassava consumption is due to a significant increase in per capita consumption in Nigeria and other African countries. For example, the per capita consumption in Nigeria increased by 40% from 88 kg yearly in the 1960s to 20 kg early 2000s (Nweke, 2004). Cassava can also be used in the industry for production of starch, malt, beer, bread, ethanol, animal feeds among others. Future increase in cassava consumption will depend on how well cassava is prepared into food forms or as material for industries.Jones (1959) provided advocates of cassava praised it because it produced the largest number of calories per hectare than any crop and for its ability to be grown on poor soil and withstand severe attack of drought, pest and disease. Because of the importance of cassava, President Olusegun Obasanjo introduced the National Cassava Policy in 2002 to promote food security through cassava production. For instance, in 2000 the Federal Government of Nigeria signed a loan agreement with the International Fund for Agricultural Development (IFAD) for the root and tuber expansion US$16 million (Federal Republic of Nigeria, 2000).On 8th August, 2000 in Nigeria President Olusgun Obasanjo inaugurated a National Committee on Cassava Production and Export to address issues relating to an increase in yield and production, post harvest management, and promotion of local and industrial utilization of cassava. President Obasanjo wished to increase food security and also export US$1 billion worth of cassava in the next three years (Bello, 2002).

The new Federal Government policy of using composite flour of 10 % cassava and 90% wheat for bread, production in Nigeria is aimed at conserving foreign exchange and encouraging industrial utilization of cassava (This Day, 10th January, 2005). Currently, the

Nigerian Government is believed to be spending about US$400 million on wheat importation annually, to meet local demand of flour by the baking industry in Nigeria. It is believed that with 10% cassava substitution, the government will save about US$40 million, which can be injected into the Nigerian cassava industry.

The commercialization of cassava has tended to undermine food security in rural areas of Nasarawa State. Cassava is the only crop that is harvested and marketed all the times of the year. By this, peasants require large parcels of land to meet up with the demand. The time devoted to the production of cassava has lessened the attention given to other crops. The resultant effect is that, cassava is overstretched as it is prently used as a cash crop among the peasants. The situation has made it possible for peasants to produce mainly for exchange.

According to IITA (2004), one innovative to achieving greater cassava production is being undertaken by the cassava grows associations. It is acquiring large parcels of land in each local government authority (LGA). Each parcel is intended to provide 1000 hectares of continuous land suitable for commercial cassava cultivation. In Nasarawa State, such associations like the Kaibo Mada RTEP Group, Baiwa Root and Tuber Group Akpajeshi Farmers Co-operative etc have acquired large parcels of land for the cultivation of cassava in various parts of the state. The Kaibo Mada RTEPGroup has acquired about 1000 hectares of land in Keffi Local Government Area for that purpose. Also the Baiwa Root and Tuber Grouphave acquired a total landmass of about 32 hectares while the Akpajeshi Farmers Cooperative Society on the other hand has acquired about 40 hectares. In addition to current production levels, farmers groups would be organized in such a way that using mechanized equipment, high yielding varieties and improving farming practices, yields (IITA, 2007).

The expansion of land devoted to cassava requires some explanation. Increase in cassava land is made possible by a decrease in the land devoted to the productionother crops. This reduction is gradually having an effect on the production of other crops. The production of rice, millet, sorghum and soya beans have drastically reduced by 75% rice, 10% sorghum, 70% soya beans, 90% millet between 2002 to-date (Ministry of Agriculture, Lafia, 2015). The land meant for these crops have been devoted to the production of cassava which is destined for the exchange.

In addition, increase in the prices of cassava products is going to serve as an incentive to the peasant population in cassava production. This may as a result lead to an intensification of surplus labour so as to achieve surplus product.

The commercialization of cassava through this policy is not only facilitating the cultivation of cassava for exchange but is also promoting the commodification of food stuff.

This is due to the emergence of advance middle capital and the local based traders popularly called “belanda” (Merchants that exploit the peasants through exchange relations that are favourable to them). This group of people are finding lucrative business in the purchase of cassava from poor peasants at low prices and distributing them to the emerging cassava industries in the state (Lafia Cassava Flour Mill). Already the Nasarawa State Government and DATCO Nigeria Limited have gone into partnership for the production of cassava flour in the state. But before the establishment of the Lafia Flour Mill, Nasarawa peasants were using cheap cassava for production of local staple foods like garri, akpu and dried cassava, etc. The low utilization of Lafia Flour Mill and other related companies across the nation is linked with the low productivity on the part of the peasants. The available cassava in the state is mainly consumed by both rural and urban areas of the state. The survival of Lafia Flour Mill depends largely on cassava that is produced manually by the peasants. The more cassava produced by peasants, the more the company is likely to increase its production. If this should be the case it is likely that, the company may offer attractive prices to the peasants. But for now, there is some kind of discouragement on the part of the peasants. They are not even producing enough for their food requirements.

The effect of the above is that, this scenario if allowed to continue may likely create such problems as pilfering, administration fraud and the use of poor land, lack of adequate accurate information and the possibility of vandalizing equipment of Lafia Cassava Flour Mill located in Lafia and Kaffi Local Governments. The lack of raw materials due to the poor prices being offered to peasants is accounted for under-utilization of the companies. The company has an installed capacity of producing 200,000 bags of cassava flour at present (John Brown, 2008). The company is therefore exploring the possibility of trying to appeal to cassava growers to supply cassava to the company through radio and television mediums.

The table below shows a number of estimates that exist as to future demand for cassava based products. The presidential initiative provides the following estimates:

Table 1: Cassava demand estimates by presidential initiative by 2014 (tones)

Product	Domestic	Export	Total
Food	5,700,00	1,825,000	7,525,000
Starch	1,770,000	3,200,000	4,970,000
Livestock	15,622,000	75,621,248	91,243,248
Ethanol	900,000	2,700,000	3,600,000
Total	**23,992,000**	**83,346,248**	**107,338,248**

The demand estimates by the presidential initiative clearly suggest that livestock and human food are the largest immediate market. The demand for human food is likely to increase as a result of rural-urban migration to be propelled by the emerging cassava industries. This situation is thus intensifying food crisis and gradually undermining the health and nutritional status of the peasantry.

4.2 The National Cassava Policy and its Capacity for Income Generation and Improved wellbeing for the Peasants

It is on record that one of the focuses of the national cassava policy in Nigeria is to promote increased output, income and well-being of the direct producers of cassava. Essentially, the policy is aimed at ensuring massive cassava production to feed the emerging cassava industries in the country and Nasarawa State in particular. The emergent cassava industries and the massive cassava production are expected to mitigate the problem of unemployment in Nigeria. The policy of the Federal Government requiring bread bakers to include 10% cassava on all bread produced in Nigeria is expected to generate six million jobs from up and down stream, and 37 small and medium enterprises as well as generate N635 billion or $5 billion income yearly (Ugeh, 2007). In addition, the project coordinating committee described cassava as the "ultimate future crop", it is hoped, would diversify the Nigerian economy as well as improve the well-being of its primary producers.

The Federal Government efforts in commercializing cassava involve funding of research into improved and high yielding varieties, aggressive awareness campaign and farmers mobilization, multiplication of new varieties, input subsidy, agricultural financing at concessionary rate, virile public private partnership, and creation of market opportunities (FGN, 2006).

In line with the policy guideline, the Nasarawa State Government had in 2007 declared every Friday half day at work to enable civil servants in the state to attend to their cassava farms. The state had also produced and installed a cassava processing machine from Holland. All these are attempts by the state government towards ensuring that peasants are encouraged to go into massive production of cassava so as to meet with the demand for it.

Three years after the release of N50.8 billion loan facilities, the loan is yet to reach the direct beneficiaries. Also in Nasarawa, the high yielding variety brought from Brazil is yet to be diffused four years later. They are still at the nursery site at Doma, Arikya, Karmo, Nasarawa Eggon and Lafia. Efforts to introduce mechanization as envisaged by this policy

have not achieved the desired result. The desired goals of achieving self sufficiency in production of food, cash crops and agro-industrial raw materials have not been successful. The operation of imported machinery is confronted by the problem of spare parts repair facilities, capital, skilled manpower and the fact that most machinery applications are incompatible with farmers cropping techniques. Available information shows that 1000 tractors imported in 2003 were without the required implements, thus rendering them unusable. Also, about 50.5 percent of the estimated 10, 000 tractors in the country are in a state of disrepair. The very low tractor density of 0.03 horse power per hectare makes the realization of massive cassava production more difficult (Hannan, 2003). Nasarawa State embarked on a lot of empowerment programmes to promote cassava production in the State. This is shown in the table below:

Table 2 Empowerment through the Cassava Production Initiative

S/N	Name of group beneficiaries	Crop	Size (ha)	Location	LGA	Beneficiaries 10% (n)	State govt. 30% (n)	FGN 10%(n)	IFAD 50% (N)	cost/ ha	Total
1	Ugbagyercass. Coop. society	Cassava	1	Agaza	Keana	11,055.00	33,165.00				44,220.00
2	Kwaghsoner Cass. Farm coop	Cassava	1	Agono	Obi	11,055.00	33,165.00				44,220.00
3	Gbata Women Proc. Group	Cassava	1	Gbata	Wamba	11,055.00	33,165.00				44,220.00
4	Arum-Tumara Women. Proc Group	Cassava	1	Arum-Tumara	Wamba	11,055.00	33,165.00				44,220.00
5	KaiboMada RTEP grou	Cassava	1	K/Mada	Keffi	11,055.00	33,165.00				44,220.00
6	Slab casprod. Coop	Cassava	1	Adogi	Lafia	11,055.00	33,165.00				44,220.00
7	Umaru Ali Akurba	Cassava	1	Shabu	Lafia	11,055.00	33,165.00				44,220.00
8	Akpajeshi Farmers coop. Sec	Cassava	1	Yelwa	Toto	11,055.00	33,165.00				44,220.00
	Total					**88,440.00**	**265,320.00**				**353,760.00**

Source: Nasarawa Agricultural Development Programme (2009)

The rationale behind the provision of empowerment programme to the outgrowers is to promote the production in Nasarawa State. Before cassava policy era in the state, most farmers were used to their traditional methods of farming using the local varieties of root and tuber crops which gave low yields and planting materials. Even the traditional methods were used in the processing activities and women participated actively in the processing of root and non- root crops in the state. The women motivation came with the introduction of Women In Agriculture (WIA) in the state in 1991 by the Agricultural Development Programme. The main objective of WIA is to boost group/individual farming activities among women farmers in Nasarawa State. Women organized themselves into groups and shown great interest in the production and processing of root and non-root crops grown in the state.

The peasants in the state embraced cassava policy with high esteem. They believe that high production of cassava would translate into high income and improved wellbeing. As a result the peasants have engaged the practice of marrying many wives to cope with the labour requirement. Most of the peasants were of the believe that the art of marrying more wives due to lack of tractors, harvesters and other farm machines is now common among the peasantry. They believe marrying more wives and boring more children would quarranttee massive cassava production and high income. Lewis (1995) described women in the Third World countries as beasts of burden because they where used to execute tasks which in advanced societies are done by mechanical power (Lewis, 1955).

4.3 The National Cassava Policy and its Capacity to Encourage the Commoditization of the Products

One of the major objectives of the National Cassava Policy is to transform cassava from being a food crop to commercial crop. The policy intends to promote mass production of cassava to provide for food security and export. It intends to increase food security and export US$1 billion worth of cassava products. This will bring about commoditization of cassava. And commodity production is a situation where production is geared towards the satisfaction of market. A commodity is a product made expressly for sale (Ake, 1983). Commditization of cassava production would promote and encourage the incorporation of the peasantry into commodity relations, the exacerbation of social inequalities and social differentiation within the peasantry. Policies such as this operate objectively to intensify

commoditization and thereby further incorporate the peasantry into the circuits of capitalist of surplus appropriation.

This will have the effect of intensifying the labour of peasant population to maintain or increase the supply of cassava in industrial capital without a commensurate improvement in their living standard and thereby intensified rural poverty. With the commoditization of cassava, the labour of some of the rural producers in Nasarawa is becoming more and more intensified without any commensurate increase in their income and welfare.

As stated earlier, the national policy on cassava production focuses on promoting the massive cultivation of cassava to serve the industrial needs of the state as well as earn foreign exchange. The massive production cassava required the use of modern agro-technologies and those who are not able to afford the use of these agro-technologies resort to marrying many wives to meet up with the labour requirement. As part of the policy, the state intensified efforts to encourage farmers to use tractors, fertilizers, high yielding varieties, pesticides and herbicides to achieve high production. But, five years after the policy came into existence, not much of the above mentioned is being used by the poor peasant population. Instead, majority of the peasants have so far commodified their labour and are selling it to capital for their reproduction. Out of the seven tractors inLafia Local Government only one tractor was functional. The rest of the tractors that were found at the site were grounded. Most tractors were grounded for lack of spare parts (Ministry of Agriculture, Lafia LGA, 2016). The peasants who want to use the tractor has to pay a sum of N2,8000 for poughing and rigding.

As part of the commoditization of cassava production is the subsidy on fertilizer. Despite government subsidy on fertilizer the prices of fertilizer have remained high at the time of this study. The commoditization of fertilizer has greatly reduced yield because of the poor nature of our soil. The table below shows the prices of fertilizer between 2004 and 2009 cropping season:

Table 3: Showing the price of fertilizer: 2004-2009

Brand	Year	Government price
NKP	2004	2500
UREA	2004	2000
NPK	2005	2500
UREA	2005	2500
NPK	2006	3500
UREA	2006	3500
NPK	2007	3500
UREA	2007	3500
NPK	2008	3500
UREA	2008	3500
NPK	2009	3500
UREA	2009	4000

Source: Ministry of Agriculture

The table above shows the official prices of fertilizer in Nasarawa State. It is obvious to note that the state so call subsidy on fertilizer never favor the poor peasants because they hardly get the product at official rate. The rich peasant, the urban-based businessmen, and the breaucrates who has access to the fertilizer at official rate and resell to the poor peasants at black market rate. The poor peasants buy fertilizer at the rate of N8,000 to N8,500 in the open market. This action reflects Marx assertion that the executives of the modern state are but a committee for managing the affairs of the whole bourgeoisie. Classical Marxism as exemplified by Marx and Engels (1977) regards the state as the executive arm of the bourgeoisie, essentially antagonistic to the interest of the dominated class. The distribution of fertilizer in the state clearly reflects the opinions of Marx. Through commoditization, fertilizer is bought by the state and sold or given to the bourgeois class at official rate as shown in the table above. The poor peasants who have no access to state power on their part buy this product from the bourgeois class at exorbitant prices. This situation has increased the cost of cassava production and other agricultural crops. Following this development, most of the peasants buy one bag of fertilizer and apply same on cassava, beans, yam, rice, maize etc. This has negative effects on yields and their wellbeing.The implication is that the state through the national policy on cassava production is set to encourage commodification of both labour and cassava products. The use of modern agricultural inputs in the production

process raise the cost of production both in monetary terms and in terms of labour time which at times end up being an exercise in futility.

The national policy on cassava production is thus perceived by the state to overcome the peasants' problems. To achieve this feat, the state and capital come together to subordinate the peasantry and further incorporate them into circuit of capital and the exacerbation of poverty of the peasantry. The national cassava policy is used as a vehicle for inducing peasants to conform to modern capitalist production by providing them with modern inputs, teaching them the modern practices and facilitating the marketing of their produce. The Federal Government through the Ministry of Commerce and Industries facilitated a trial export of 1, 000 tones of cassava chips to China and other countries (PRCU, 2007). The cassava policyhas raised the expectation of the primary producers but is yet to impact positively on the peasantry.

4.4 The Cassava Policy and its Capacity for Agro-Industrialization

One of the objectives of the national policy on cassava production is to step up industrial utilization of cassava in Nigeria. The intention according to the programme coordinating unit (2005) is to put Nigeria in the global context for competition. By doing so, the country needs to up-grade the use of cassava into primary industries such as starch, ethanol, chips and flour in order to provide an industrial base for further diversification of the national economy (PRSCU, 2005).

The IITA has the African mandate for cassava development. The institute changed its focus to research for development with emphasis on the downstream sector development. Beginning from 2002, the IITA had focused its attention on a market driven technology transfer and commercialization of cassava. The IITA cassava market development activities since 2002 including hosting of the cassava competitiveness workshop in 2002, the implementation of the cassava Mosaic disease and the cassava enterprise development projects. The institute in 2003 concluded two sub-sector studies on cassava in Nigeria and made significant inputs into NEPAD Pan-African Cassava initiative on cassava. The IITA is currently implementing three cassava Mosaic diseases (CMD), the cassava enterprise development project (CEDP) and Cassava bio-fortification development project. The primary focus of the CMD project is to use a fast track approach to build a defence against the virulent form of the CMD by introducing resistant varieties to the disease. CEDP is to support micro and small scale agro-processing activities in the pre-emptive management or the cassava Mosaic disease project and so it is referred to IITA as the integrated cassava project. As of 2004, the CEDP and CMD projects were experimented in 12 states mostly in south-east

and South-south. The projects are gradually expanding to cover the entire country. The bio-fortification project however is still in the making. It is however pertinent to note that other states outside the ones mentioned above also indicated interest in the project and are exploring the possibility of paying their counterpart funds (IITA, 2006). The CEDIP is funded by the USAID, SPDC and the IITA, while the Federal Government and other participating states fund the CMP project. The ICP works through partners and all stakeholders in the development of sustainable technology transfer, commercialization and industrialization of the Nigerian cassava sub-sector (PRCU, 2006).

According to the PRCU (2006), the integrated cassava project had in 2004/2005 set up four small-scale cassava processing plants in Abia, Akwa-Ibom and Delta States and formed a network of Cassava equipment fabricators in Nigeria. The United Nations Industrial Development Organization also has community-based projects with location of multi-product micro-cassava processing plant in Abia, Oyo and Benue States. There are also several other private sector initiatives manifested in private investments; these include the Nigerian Starch Mills that has just recently retooled its plants, NYIAMCO ethanol plant which has been bought by a private investor Dura Clean (but yet to commence full production), Real Food , Ibadan (retooling) peak products, Abeokuta, Delta Food Benin-City, JOF Industries, Ogun state (interested in glucose production from cassava starch), Conwave Industries, Delta State (starch), Louis Carte, Enugu (starch), Obasanjo Farms Limited, Sango-ota (ethanol), Willbahi Investment (starch), Ashitech Global Resources (Benue State starch, flour and ethanol), lobi Cassava Flour Mill, Benue (flour), Lafia cassava flour Mill and Keffi flour mill. The cassava flour mill was established in 2005.The machine procured in Holland by the Nasarawa State Government was meant to process starch and not cassava flour. It is obvious that lack of technical knowledge is responsible for the non-production of starch. The company is currently managed by a foreigner (R. Dutchner).

The Lafia Mill and Keffi Mill are not functioning well. Lack of spare parts, manpower and the dwindling cassava market in Nigeria are responsible for non-functioning of the Mills. Abba Ruma (2008) observed that cassava farmers in the country are not able to get market for their produce because of constraint in deploying technology to processing cassava. He however maintained that, many farmers in the country went into large scale cassava farming since 2006 as a result of encouragement by the administration of former president Obasanjo but two years after, the farmers are complaining of lack of market problem. Abba explained that, government has therefore taken cognizance of the fact that processing is another

challenge which could strengthen the value chain that will enable the farmers leverage and stabilize price (DailyTrust, March 11th, 2008).

It has been argued that policies such as this will only deepen dependency of the third world countries. Any policy in Africa which focuses on the use of foreign technology and market designed to further intensify dependence. Foreign technology, it is further argued, tends to compound the problem of dependence due to the initial and recurrent cost of machinery, spare parts, fertilizers, agro-chemicals and high yielding varieties that go with development package.

The problems of dependence is not only limited to the level of foreign technology. Also it has been argued that the commercialization of cassava would only tend to facilitate the incorporation of the peasantry into the circuit of capital, making them to rely heavily on the market forces for their production. The policy is gradually introducing modern technology into farming practices of Nasarawa peasants. Obvously most ofthe peasants would want to use tractors, fertilizer, pesticide and herbicides and even harvesters. However, most of the peasants lack the influence to acquire these farming inputs. Even fertilizer is for those who have connection with those in position of authority and pesticides and herbicides are beyond the reach of the poor peasants. For instance matchet which is one of the most important implements is now imported from China, Indonesia and other places with high prices.

In place of tractors, the machet is very useful to peasants as they use in clearing the grasses and shrubs. The inability of Nasarawa peasants to produce these items themselves means they have to rely on the market for these items. There exists a form of exploitation between capital and a peasant since the peasants has to depend on foreign implements like matchet to engage in production.

The problem that is linked with the use of foreign technology especially machines that are imported into the country is the problem of spare parts for maintaining the machinery and technical-know how. Spare parts are a problem in Nigeria because most of these being used are imported from advanced capitalist nations. Thus, lack of spare parts for machines that are to be used to bring about a sound agro-industrial policy would rather cripple it.Information available reveals that, 1000 tractors imported in 2003 to boost cassava production and other crops in Nigeria were without the required implements, thus rendering them unusable. Also about 50.5% of the estimated 10,000 tractors in the country are in a state of despair. The very low tractor density of 0.03 horse power per hectare are some of the problems perceived to stand against the full realization of the policy (Hannan, 2003).

The cassava production policy is meant to promote massive production of cassava to serve as raw materials for the emerging cassava industries in Nigeria. The products of these industries it is hoped if produced in high quality and quantity shall be consumed locally and internationally. The contradiction here is that, peasants have since commenced massive production of cassava without a corresponding market. They are still being disposed of their products in the traditional markets which are well known. Recently, the Federal Ministry of Commerce and Industries facilitated a trial export of 1,000 tons of cassava chips to China. It is hoped that, the export strategy will be sustained.

The idea of using modern farm inputs is intended to raise yields for market. Such full scale dependence on the market by the peasantry for the supply of farming inputs and the disposal of their produce does not guarantee any improvement in their standard of living and the possibility of helping the peasants from the deepening poverty. The price of the inputs the peasants are going to buy or are buying is being determined not by the peasants but by capital. Ake argued that another notable source of contradiction between capital and the peasants was the attempt by capital to bring peasants into commodity relations and to extract surplus value from them by manipulating the condition of production and exchange. Agricultural improvement schemes and legislative measures were used to maneuver peasants into producing particularly to specifications, in certain preferred quantities and with specific inputs, tools and techniques. This was done not in the interest of peasants but in the interest of the people who made the rules and launched the agricultural schemes. They got the farmer to produce it in a manner most suitable to their advantage. At the same time, the peasants become more dependent and more exploitable.

In the sphere of exchange, the peasant was exploited through control of commodity collection and marketing by monopoly agencies such as market boards, which enabled capital to expropriate the value of the commodity in the world market. But a lot of measures used for bringing his conditions of production and exchange were unpopular. Capital profited only by engendering enemies of the very system that established it to profit.

The use of modern foreign technology is therefore seen as an attempt to expose the Nigerian peasants as Oculi (1980) has argued to new forms of dependence on the technology of multinational agribusiness firms and other industrial firms. The commercialization of cassava is being promoted through this cassava production programme to further facilitate the incorporation of the peasantry into circuit of capital.

Thus the cassava policy came about among other things to relieve the country of being dependent on foreign wheat. A situation which it is believed would save the country

$40 billion US dollars yearly. But this will also lead to another form of dependence which is going to be foreign technology. Such attempts are making the peasants to depend on foreign production resources whose continuous supply and orderly functioning may not guarantee their production and reproduction due to intervening variables such as the availability of machinery spare parts and foreign exchange for their import.

CHAP`TER FIVE

ASSESSMENT OF CASSAVA PRODUCTION IN NASARAWA STATE

5.1 Analysis and Discussion of Research Questions

Research Question 1: How is cassava produced in Nasarawa State?

Cassava production involves the application of the mental and physical ability to transform the objects of labour by using the instruments of labour to produce cassava in order to make a living. This human capacity to produce cassava involves different stages: land preparation, labour processes, cassava processing, distribution and exchange as well as government policy to determine farmers' access to the means of production, processing and marketing in order to maximize the potentials of cassava production in terms of food security, employment as well as income generation.

In Nigeria, cassava is one of the basic starchy foods. It has many names given to it by the many ethnic groups in Nigeria. Example, the Hausa calls it 'Rogo', the Yoruba calls it 'Ege' while the Igbo calls it 'Akpu' (trifter.com Africa in.2008). Cassava is planted during the raining season. This varies from March to November in the rain forest, April to August in the derived savanna, May to July in the Southern Guinea Savanna (SGS) and July to August in the Northern Guinea Savanna (NGS). Cassava is compatible with many crops when intercropped. The best intercrops of cassava in Nigeria include maize, melon, groundnut, cowpea and vegetables. Other less important intercrops particularly in the South-South and South Eastern Nigeria include yam, cocoyam, sweet potato, plantain and banana; stems of improved varieties can be obtained from National Seed Service (NSS), state office of Agricultural Development Project (ADP), Nigeria Cassava Growers Association (NCGA) and several out-growers who produce quality stems for sale (google, cassava-02.indd).

In Nasarawa State cassava is one of the major root and tuber crops produced in Nasarawa State. The production of the crop is dominated by the small scale-farmers or the poor peasants spread across all the nooks and cranies of the State. A great percentage of the growers in the state adopt the traditional method of farming to produce cassava and other root and tuber cropslike yam, cocoyam, sweet potatoes among others. There are villages or areas where cassava, sweet potatoes, millet, beans, rice and yam are the most important crops depending on farmers ranking in the cropping system.

Cassava is grown in all parts of Nasarawa state. The record of cassava production indicates that the total number of farm families involved in the production were one hundred and eighty thousand, four hundred and thirty three (180,433) (NADP, 2000). The current production level in the state is put at two million, four hundred and sixty four thousand, one hundred and forty (2,464,140) metric tons and a total of ten (10) processing centers were provided, four (4) in the southern zone, four (4) in central zone and two (2) in western zone (NADP, 2010).

Before the adoption of the National Cassava Policy in 2002, cassava has been one of the major root and tuber crops produced in the state through the Root and Tuber Expansion Programme. In order to bring into focus the production processing and marketing aspect of root and tuber crops five components were identified; and they include diversification of improved root and tuber production technologies, multiplication and distribution of improved planting materials, improved adaptive research and extension, diversification of processing options and project management and evaluation. Individuals and groups were mobilized in the state to take part in RTEP.Three hundred and thirty three (333) households made up of 201 males and 132 females were identified as beneficiaries of the programme. A total of 78.75 hectares of improved RTEP 36.55 hectares were cultivated through direct effort by the NADP (Root and Tuber Expansion Programme, Internal Implementation Completion Report, 2010).

The National Cassava Policy was an extension of RTEP in Nasarawa State with a particular focus on cassava. The policy encourages the use of modern farming technology such as plough, tractors, mechanized graters, and even chemicals in the production and processing of cassava. The ADP made available a number of empowerment programme to the individuals and groups to facilitate the production of cassava in the state. Mechanization of cassava production which the policy is being promoted will promote food security and output level of cassava in Nasarawa State.

Table 1: Nature of land distribution and ownership in the study area

Types of land ownership/transfer		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inheritance	175	46.42	46.42	46.42
	Lease	69	18.30	18.32	64.74
	Sales/Purchase	48	12.73	12.73	77.47
	Government allocation	18	4.77	4.77	82.24
	Community	67	17.77	17.77	100
	Total	377	100	100	

Source: Field survey 2016

From the above table, 46.42% of the farmers owned land through inheritance in the areas of study, while 18.30% of the farmers owned their land through lease; about 12.73% owned land through sale/purchase; 4.77% land were allocated through government. The customary land tenure system gave the community right to exercise control, occupation and use of landed property. Therefore, 17.77% of farmers owned their land through community. The land owned by the individual could be inherited but not alienated (Omokore , 2007). But the Land Use Act of 1978 declared that all land in Nigeria belongs to the government; no individual, family of community can own land except the right to occupy and use it. The law provides sale and purchase of land for agricultural purposes through its maximum ceiling for both cultivation and grazing (Baba, 1975). This trend made it a highly tradable economic commodity because of its value (Ega, 1983). This case of land commercialization and its effects in the production process is further discussed in focus group.

Table 2: Distribution of respondents according to availability of labour

RESPONSE		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Available	117	31.0	31.0	31.0
	Not Available	260	68.9	68.9	100.0
	Total	377	100	100	100.0

Source: Field survey 2016

Labour is an essential process of production without which life is meaningless.All the food we eat is a product of labour. From the above table, farmers suffer availability of labour which represents 68.9% of the total distribution. On the other hand 31% opines that there is availability of labour. The implication of this is that the able bodied individuals particularly the young people that are expected to provide adequate labour in agriculture are no longer in the areas due to attractiveness of the city and in their quest for white collar jobs. This affected

agricultural production particularly cassava production in the study area.Cassava processing is highly labour intensive.

Table 3: Distribution of respondents according to source of labour

Source of Labour		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Individual	143	37.9	37.9	37.9
	Family	120	31.8	31.8	69.7
	Joint/Group labour	94	24.9	24.9	94.6
	Employed	20	5.4	5.4	100
Total		377	100.0	100.0	

Source: Field survey 2016

In table 2 above, the source of labour for the farmers is working alone as individuals which represents 37.9% of the total distribution. Also 31.8% uses family as source of labour, while 24.9% engages in joint/group labour and about 5.4% employed others in cassava production.

Table 4: Distribution of responses according to instruments of labour used in cassava production in the study area

Instruments of Labour	Frequency	Percentage
Hoe	169	44.8
Cutlass	69	18.3
Shovel	65	17.2
Shear	20	5.3
Knife	20	5.3
Axe	24	6.3
Tractor	10	2.6
Total	377	100

Source: Field Survey 2016

The table 3 above shows that 44.8% of the sampled farmers use hoe in cassava production, 18.3% use cutlass, 17.2% use shovel, 5.3% use shear, 5.3% use knife, 6.3% use axe and 2.6% use tractor respectively. This indicates that majority of respondents use traditional instruments in cassava production in the study area.

Table 5: Distribution of responses according to the method of weed control in the study area

Method of weed control	Frequency	Percentage
Manual weeding	185	49.0
Chemical weeding	144	38.1
Both manual and chemical weeding	48	12.7
Total	377	100

Source: Field Survey 2016

From the table above it is clear that 49.0% of the sampled farmers used manual weeding control method, 38.1% of the sampled farmers used chemical to control weeds on their cassava farm and 12.7% of the farmers sampled used both manual and chemical methods of weeds control.

Table 6: Distribution of responses according to the types of herbicides used

Types of herbicides used	Frequency	Percentage
Paraquate	56	14.8
Glycel	46	12.2
Primextra	48	12.7
Sarosate	48	12.7
Select	42	11.1
Dansate	32	8.4
Propan	30	7.9
Weed off	36	9.5
Did not use herbicide	39	10.3
Total	377	100

Source: Field Survey 2016

The above table shows that 14.8% of the farmers sampled, used paraquate herbicide to control weeds on their cassava farm, 12.2% used glycel, 12.7% used primextra, 12.7% used sarasate, 11.1% used select, 8.4% used dansate, 7.9% used propan, 9.5% used weew off and 10.3% of the farmers sampled did not use any herbicide. Hence, farmers prepare to use paraquate because it is affordable, also a good percentage of farmers who either did not use any of the herbicides because of shortage or lack of money and high cost of herbicides in the study area.

Table 7: Cost of cassava production in the study area

Local Government Area	Cultivation (₦)	Harvesting (₦)	Transportation (₦)	Total (₦)
Toto	1800	2,000	1600	5400
Nasarawa Eggon	1600	1800	1500	4900
Lafia	1900	2,200	1800	5,900

Source: Field Survey (2016)

A survey of three communities to sample the cost of production reveals that the cost differs from one community to another. These communities represent the three local governments of Toto, Nassarawa Eggon and Lafia. In the study area the cost of production is on the increase because there is the problem of in rural-urban migration. This situation is compounded by lack of access to fund or credit facility. Because of non-availability of credit facilities peasants often source their finances from their local contributions or Thrifts and Loan co-operatives. According to Mallam Musa Mamam, Mai Anguwa Ombi II, Shabu said "these loans are given with interest rate of 10% and the beneficiary is usually given a period of time within which to pay back and failure to pay will attract additional interest or confiscation of peasant's property".

The high cost of labour is due to the increasing rural-urban migration. This created the problem of labour shortages in the rural Nasarawa and peasants are now forced to pay whatever that may be asked from them by the available labour.

Despite the amount of efforts put by peasants in cassava production, their condition has not improved as expected. In addition there is no attractive market for cassava products. Market remains the traditional markets where the peasants sold their products to middlemen or capitalists.

Majority of the peasants interviewed complained of the price and the process of selling the product in the local market. That the process is so exploitative and the money they realized will not meet up their daily needs. The peasants also complained about a lot of hitches they encounter in trying to convey cassava from the farm to markets. This is in line with views of Fada (2008) that marketing produce in Nigeria is complicated by many hidden factors related to supplying produce to markets. Unfortunately most roads linking the rural and urban areas of the state are not tarred and maintenance is irregular.

The deplorable conditions of the roads made transportation difficult and added to the cost of cassava products. While travelling, we interviewed eight "garri" sellers travelling from Adudu village to Lafia market they responded that the pick-up van that was conveying their garri charged them between ₦500.00 to ₦600 per bag for a distance of 10 kilometres.

In another instances, Garri and akpu sellers from villages in Toto like Ohizi, Nyezi and Ohere said that it takes them almost between 5-6 hours to board a vehicle to convey their products to the markets in Toto, Ugya and Gadabuke. The same experience was shared by 'akpu' and garri sellers from Anchau of Akwanga Local Government that transporters often collect between ₦250 to ₦300 for a bag of 'akpu'and between ₦350-450 for a bag of garri to get them conveyed to Kokona and Akwanga markets. The transportation costs are higher during the raining than the dry season. Peasants who convey their cassava and cassava products from the villages or hinterland to urban markets normally pay heavily for it. A full pick-up load of 'garri' from Toto villages to Keffi is ₦16, 000 – N18,000. The experiences are not different in all parts of the state. All these constitute bottlenecks which must be resolved in order to have a viable cassava market.

Research Qustion 2: What is the impact of cassava production on income and wellbeings of peasants in Nasarawa State?

Table 8: Price of cassava product in some markets in the study area

Market	Akpu (₦)	Gari (₦)	Dried cassava (alebo) (₦)
Ancho	3,000.00	3,200.00	3,500.00
Shabu	3,500.00	4,300.00	3,800.00
Karmo	3,000.00	3,500.00	3,200.00

Source: Field Survey (2016)

A survey of Ancho, Karmo and Shabu markets reveals the following prices as shown in the table above. The prices shown in the table above are not good enough when compared to the amount of labour, resources, time and energy that are expended in cassava production. This indeed, justifies the claim by most peasants that they produce cassava for reproduction. To be candid it is only attractive prices of cassava that can make the peasants maintain or add on the current production. Some years back particularly in 1999 when a bag of "akpu" was sold for N4,500 farmers who had good harvest were happy. In addition when a basin of gari was sold for N2, 000 the same time, peasants who had good harvest celebrated, but the situation was not the same in 2001 cropping season when the cassava experienced a dramatic fall in prices.

Experience has shown that when the demand for cassava in the world market rises, local prices of garri and other related products of cassava would also go high due to the shortage created at home (Fada, 2007). According to Nweke (2004) provides that cassava producers were losing money because of cassava glut and declining cassava prices. Later in 2001, the price of cassava rose sharply in Nigeria because of the increased demand for dried cassava for livestock feeds in Europe following herd rebuilding required after the outbreak of the mad cow diseases (FMA, 2004).

There are some reasons for the high price of garri as a result of efforts to export dried cassava roots and livestock feed to Europe from Nigeria. The duration of yield normally creates opportunity for a shortage or scarcity hence the time it takes both varieties to mature, during which time need may have shifted to alternative sources. Another explanation is that farmers find difficulties in resulting sufficient migrant hired labour to plant more cassava, harvest and process cassava as a result of increasing wage rate. In terms of increasing employment, we found out that the Lafia Cassava Flour Mill has offered employment to about 40 people at present. The factory at Karmo has also provided direct employment to about 30 people. A sizeable number of people are now engaged in one form of cassava production and distribution throughout the state. Government policy of including 10 percent of cassava in bread and confectionary products may generate 6 million jobs and N635 billion or $5 billion income yearly (FGN, 2007).

Obviously the policy provides indeed another opportunity for increased output, incomes and welfare of the peasantry. But these are said to be potential hence, it is only full implementation that can maximize these potentials. Our findings have shown that peasants are yet to earn more income despite producing more cassava. Living standard in fact is rather worsening due to declining prices of cassava products. To overcome with their daily obligations, peasants are now required to harvest large portions of their cassava farms. This therefore requires time and energy which should have expended on the production of other crops. Peasants are now investing much in cassava production as shown above without a commensurate benefit or income.

Table 9: Distribution of respondents according to range of income obtained from sales of cassava in the study area, 2004

Range of income(N)	Frequency	Percentage
10,000-50,000	65	17.2
50,000-100,000	88	23.3

100,000-150,000	77	20.4
150,000-200,000	64	16.9
200,000-25000	49	12.9
250,000-300,000	24	6.3
300,000-400,000	10	3.0
Total	377	100

Source: Field Survey 2016

The table above shows that 17.2% of the sampled farmers earned N10,000-N50,000 per year, 23.3% earned N50,00-N100,000 per year, 20.4% earned N100,000-150,000 per year, 16.9% earned 150,000-200,000 per year, 12.9% earned 200,000-250,000 per year, 6.3% earned 250,000-300,000 per year and 3.0% earned 300,00-400,000 per year. This shows that majority of the farmers in the study area did not earn enough income; they need to improve their production in order to increase their income level.

Table 10: Distribution of respondents according to range of income obtained from sales of cassava in the study area, 2005

Range of income(N)	Frequency	Percentage
10,000-50,000	49	12.9
50,000-100,000	88	23.3
100,000-150,000	77	20.4
150,000-200,000	24	6.3
200,000-25000	65	17.2
250,000-300,000	64	16.9
300,000-400,000	10	3.0
Total	377	100

Source: Field Survey 2016

The table above shows that 12.9% of the sampled farmers earned N10,000-N50,000 per year, 23.3% earned N50,00-N100,000 per year, 20.4% earned N100,000-150,000 per year, 6.3% earned 150,000-200,000 per year, 12.9% earned 200,000-250,000 per year, 16.9% earned 250,000-300,000 per year and 3.0% earned 300,00-400,000 per year.

Table 11: Distribution of respondents according to range of income obtained from sales of cassava in the study area, 2006

Range of income(N)	Frequency	Percentage
10,000-50,000	65	17.2
50,000-100,000	49	12.9
100,000-150,000	77	20.4
150,000-200,000	10	3.0
200,000-25000	88	23.3
250,000-300,000	24	6.3
300,000-400,000	64	16.9
Total	377	100

Source: Field Survey 2016

The table above shows that 17.2% of the sampled farmers earned N10,000-N50,000 per year, 12.9% earned N50,00-N100,000 per year, 20.4% earned N100,000-150,000 per year, 3.0% earned 150,000-200,000 per year, 23.3% earned 200,000-250,000 per year, 6.3% earned 250,000-300,000 per year and 16.9% earned 300,00-400,000 per year. This shows that there is improvement in the income level of the sampled farmers in the study area as 64 (16.9%) earned between N300,00-N400,000.

Table 12: Distribution of respondents according to range of income obtained from sales of cassava in the study area, 2007

Range of income(N)	Frequency	Percentage
10,000-50,000	77	20.4
50,000-100,000	88	23.3
100,000-150,000	65	17.2
150,000-200,000	64	16.9
200,000-25000	49	12.9
250,000-300,000	24	6.3
300,000-400,000	10	3.0
Total	377	100

Source: Field Survey 2016

The table above shows that 20.4% of the sampled farmers earned N10,000-N50,000 per year, 23.3% earned N50,00-N100,000 per year, 17.2% earned N100,000-150,000 per year, 16.9% earned 150,000-200,000 per year, 12.9% earned 200,000-250,000 per year, 6.3% earned 250,000-300,000 per year and 3.0% earned 300,00-400,000 per year.

Table 13: Distribution of respondents according to range of income obtained from sales of cassava in the study area, 2008

Range of income(N)	Frequency	Percentage
10,000-50,000	65	17.2
50,000-100,000	24	6.3
100,000-150,000	77	20.4
150,000-200,000	64	16.9
200,000-25000	49	12.9
250,000-300,000	88	23.3
300,000-400,000	10	3.0
Total	377	100

Source: Field Survey 2016

The table above shows that 17.2% of the sampled farmers earned N10,000-N50,000 per year, 6.3% earned N50,00-N100,000 per year, 20.4% earned N100,000-150,000 per year, 16.9% earned 150,000-200,000 per year, 12.9% earned 200,000-250,000 per year, 23.3% earned 250,000-300,000 per year and 3.0% earned 300,00-400,000 per year.

Table 14: Distribution of respondents according to range of income obtained from sales of cassava in the study area, 2009

Range of income(N)	Frequency	Percentage
10,000-50,000	10	3.0
50,000-100,000	88	23.3
100,000-150,000	77	20.4
150,000-200,000	64	16.9
200,000-25000	49	12.9
250,000-300,000	24	6.3
300,000-400,000	65	17.2
Total	377	100

Source: Field Survey 2016

The table above shows that 3.0% of the sampled farmers earned N10,000-N50,000 per year, 23.3% earned N50,00-N100,000 per year, 20.4% earned N100,000-150,000 per year, 16.9% earned 150,000-200,000 per year, 12.9% earned 200,000-250,000 per year, 6.3% earned 250,000-300,000 per year and 17.2% earned 300,00-400,000 per year.

Table 15: Distribution of respondents according to range of income obtained from sales of cassava in the study area, 2010

Range of income(N)	Frequency	Percentage
10,000-50,000	64	16.9
50,000-100,000	88	23.3
100,000-150,000	77	20.4
150,000-200,000	65	17.2
200,000-25000	49	12.9
250,000-300,000	24	6.3
300,000-400,000	10	3.0
Total	377	100

Source: Field Survey 2016

The table above shows that 16.9% of the sampled farmers earned N10,000-N50,000 per year, 23.3% earned N50,00-N100,000 per year, 20.4% earned N100,000-150,000 per year, 17.2% earned 150,000-200,000 per year, 12.9% earned 200,000-250,000 per year, 6.3% earned 250,000-300,000 per year and 3.0% earned 300,00-400,000 per year.

Table 16: Distribution of respondents according to range of income obtained from sales of cassava in the study area, 2011

Range of income(N)	Frequency	Percentage
10,000-50,000	153	40.5
50,000-100,000	141	37.3
100,000-150,000	59	15.9
150,000-200,000	20	5.3
200,000-25000	3	0.7
250,000-300,000	1	0.2
300,000-400,000	-	-
Total	377	100

Source: Field Survey 2016

The table above shows that 40.5% of the sampled farmers earned N10,000-N50,000 per year, 37.3% earned N50,00-N100,000 per year, 15.9% earned N100,000-150,000 per year, 5.3% earned 150,000-200,000 per year, 0.7% earned 200,000-250,000 per year, 0.2% earned 250,000-300,000 per year and non of the sampled farmers earned 300,00-400,000 per year. This shows that majority of the farmers in the study area earned below N200,000; this can be due to inter and intra ethnic crises that engulfed in the state during the period where majority of the farmers were displaced from their farms thereby affecting food production particularly cassava.

Table 17: Distribution of respondents according to range of income obtained from sales of cassava in the study area, 2012

Range of income(N)	Frequency	Percentage
10,000-50,000	89	23.5
50,000-100,000	88	23.3
100,000-150,000	77	20.4
150,000-200,000	64	16.9
200,000-25000	49	12.9
250,000-300,000	6	1.5
300,000-400,000	4	1.0
Total	377	100

Source: Field Survey 2016

The table above shows that 23.5% of the sampled farmers earned N10,000-N50,000 per year, 23.3% earned N50,00-N100,000 per year, 20.4% earned N100,000-150,000 per year, 16.9% earned 150,000-200,000 per year, 12.9% earned 200,000-250,000 per year, 1.5% earned 250,000-300,000 per year and 1.0% earned 300,00-400,000 per year. This also shows that the income level of the majority of the farmers in the study area was not encouraging this can be due to the aftermath of the crises and rural-urban drift.

Table 18: Distribution of respondents according to range of income obtained from sales of cassava in the study area, 2013

Range of income(N)	Frequency	Percentage
10,000-50,000	75	20.2
50,000-100,000	88	23.3
100,000-150,000	77	20.4
150,000-200,000	64	16.9
200,000-25000	49	12.9
250,000-300,000	20	5.3
300,000-400,000	4	1.0
Total	377	100

Source: Field Survey 2016

The table above shows that 20.2% of the sampled farmers earned N10,000-N50,000 per year, 23.3% earned N50,00-N100,000 per year, 20.4% earned N100,000-150,000 per year, 16.9% earned 150,000-200,000 per year, 12.9% earned 200,000-250,000 per year, 5.3% earned 250,000-300,000 per year and 1.0% earned 300,00-400,000 per year. This shows that majority of the farmers in the study area are low income earner, they need to improve their production in order to increase their income level.

Table 19: Distribution of respondents according to range of income obtained from sales of cassava in the study area, 2014

Range of income(N)	Frequency	Percentage
10,000-50,000	24	6.3
50,000-100,000	10	3.0
100,000-150,000	77	20.4
150,000-200,000	64	16.9
200,000-25000	49	12.9
250,000-300,000	65	17.2
300,000-400,000	88	23.3
Total	377	100

Source: Field Survey 2016

The table above shows that 6.3% of the sampled farmers earned N10,000-N50,000 per year, 3.0% earned N50,00-N100,000 per year, 20.4% earned N100,000-150,000 per year, 16.9% earned 150,000-200,000 per year, 12.9% earned 200,000-250,000 per year, 17.2% earned 250,000-300,000 per year and 23.3% earned 300,00-400,000 per year. This shows that there is improvement in the income level of the majority of the farmers in the study area as a good number of them earned up to N400, 000 and for the farmers to earn more income they need to improve their production.

Research Question 3: What are the challenges of Cassava production in Nasarawa state?

Table 20: Distribution of respondents according to challenges of cassava production

Responses		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inter and Intra Ethnic Crises	133	35.2	35.2	35.2
	Poor infrastructural development	22	5.8	5.8	41
	Poor implementation of government policy on cassava production	50	13.2	13.2	54.2
	Problem of pricing of cassava products	22	5.8	5.8	60
	Poor land holdings	90	23.8	23.8	83.8
	Poor storage/processing facilities	60	16.0	16.0	100.0
	Total			100.0	
Total		377	100.0		

Source: Field survey 2016

The table above shows that inter and intra ethnic crises has affected cassava production with about 35.2% having the highest, followed by poor land holdings 23.8%. Cassava is the only root crop that is harvested and marketed throughout the year. Therefore, peasants need large parcels of land for cassava production to satisfy the food requirement of the people.

However, IITA (2004) provides that one innovative initiative to achieve greater cassava production is being undertaken by the cassava Growers Associations. It is acquiring large parcel of land in each local government authority.

Poor storage/processing facilities 16%, poor implementation of policy 13.2%, while poor infrastructural development and problem of pricing of cassava products has 5.8% each.

Table 21: Distribution of respondents according to challenges affecting availability of land in the areas

Challenges		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Arbitrary selling of farmland	163	43.2	43.2	43.2
	High prices of farmland	120	31.8	31.8	75.0
	Farmland being used for residential/office buildings; road/other constructions	94	24.9	24.9	100.0
Total		377	100.0	100.0	

Source: Field survey 2016

In table 11, 43.2% of the farmers have sold their land arbitrarily while 31.8% said that land prices have increased such that money and power had become the strongest means of acquisition of any size of land (Omokere, 2007). 24.9% were of the opinion that farmland has been used for residential/office buildings, road and other constructions. Ega (1980), Omokhudu (1988), observed that, Nigeria has an abundant cultivable land area of about 71.2 million hectares, only 34 million or about 50% is put into cultivation. Availability of land for farming will enhance agricultural transformation and consequently user's productivity and welfare (Odebode, 2008).

Research Question 4: What are the impact of government policy and intervention in cassava production in the study area?

Table 22: Distributions of respondents according to awareness of government policy on cassava production

Awareness of extension services		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	82	21.8	21.8	21.8
	No	295	78.2	78.2	100.0
	Total	377	100	100	100.0

Source: Field survey 2016

According to the table above, higher percentage of total respondents (78.2%) of the sampled farmers were not aware of extension services in the study area while 21.8% said they were aware of extension services. This may have to do with their level of education and access to information.

Table 23: Distribution of respondents according to inputs obtained from government intervention

Intervention		Frequency	Percent	Valid Percent	Cumulative Percent
	Loan facility	27	7.2	7.2	7.2
	Improved Cassava cuttings	35	9.3	9.3	16.5
	Fertilizer	297	78.7	78.7	95.2
	Tractor	18	4.8	4.8	100
Total		377	100.0	100.0	

Source: Field survey 2016

In the table above, the distribution shows that 7.2% of respondents have access to loan facility; 9.3% also have access to improved cassava cuttings; while 78.7% have access to fertilizer and only 4.8% were able to access tractor for cassava farming.

Table 24: Distribution of responses according to technical information received from government intervention

Technical information received	Frequency	Percentage
Source of fertilizer	96	25.4
Improved varieties of cassava cuttings	90	23.8
Labour	45	11.9
None	146	38.7
Total	377	100

Source: Field Survey 2016

The table above shows that 38.7% of the sampled farmers, did not receive any technical information from government agents, 25.4% received technical information about source of

fertilizer, 23.8% received technical information about improved varieties of cassava and 11.9% received technical information about labour respectively.

Table 25: Distribution of respondents according to effectiveness of government policy on cassava production

RESPONSE		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Effective	90	23.8	23.8	23.8
	Not Effective	287	76.2	76.2	100.0
	Total	377	100	100	100.0

Source: Field survey 2016

The effectiveness of government policy as determined by the respondents showed that 23.8% said that government policy has been effective in the study area while majority representing 76.2% were of the opinion that government policy on cassava production is not effective. May be majority of the peasants are not conscious of the policy. For the rich peasants and some of the poor peasants who are conscious of the said the policy is effective.

5.2 **Analysis and Discussion of Interview Questions**

Section A: Demographic Charateristic of the Respondents

Table 26: Distribution of Respondents According to Age Group

Age group		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	25-34	45	11.94	11.94	11.94
	35-44	99	26.26	26.26	38.20
	45-54	116	30.77	30.77	68.97
	55-64	117	31.03	31.03	100.0
Total		377	100.0	100.0	

Source: Field survey 2014

Age distribution of the population is very important force in the production process. It determines the amount of labour force or working population; it determines mobility of labour, occupational distribution of the population and availability of able-bodied people for agricultural production (Stella, 2008). A large proportion of farmers in the areas fall within the age of 55-64, thus, the age-range is considered as ageing population which affected agricultural production. This has a far-reaching implication particularly that the younger age-group is not interested in cassava farming.

Table 27: Distributions of Respondents According to Marital Status

Marital status		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Separated/Divorce	90	23.87	23.87	23.87
	Single	95	25.20	25.20	49.07
	Married	192	50.93	50.93	100.0
Total		377	100.0	100.0	

Source: Field survey 2014

This table is showing the respondent of marital status of peasants' cassava farmer in Nassarawa State in which most of them are married and is also showing that there are about 25.20% and 23.87% that are single and separated may be through divorce or any natural means.

Table 28: Distribution of Respondents According to Educational Level

Educational Level		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Primary	283	75.07	75.07	75.07
	Secondary	90	23.87	23.87	98.94
	Tertiary	4	1.06	1.06	100.0
Total		377	100.0	100.0	

Source: Field survey 2014

The above table reveals respondents educational level of various cassava famers in Nasarawa State, Education is an important instrument for effective changes in individual's skills, value system and knowledge. The educational level of cassava farmers in the state is very low. It is clear from the table above that 75.07% of the farmers had primary education, 23.87% had secondary education while only 1.06% had tertiary education.

Table 29: Distributions of Respondents According to Religious Believes

Religion		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Islam	153	40.6	40.6	40.6
	Christianity	130	34.5	34.5	75.1
	Traditional	94	24.9	24.9	100.0
Total		377	100.0	100.0	

Source: Field survey 2014

In many rural areas in Nigeria both male and female population belong to one religion or the others. In the above table, a large percentage of cassava farmers were Muslims (40.6%); followed by those that are Christians (34.5%) and about 24.9% are traditional worshippers.

Section B: Interview Questions

Question 1: What are the levels of cassava production in Nasarawa State?

Nasarawa State is one of the major cassava producing states in Nigeria. The production levels increased due to government intervention particularly in 2002 when the state provided the farmers with improved cassava cuttings, chemicals, motorized grater, loans, fertilizer and technical information through extension service agents. The table below shows the production levels of cassava in Nasarawa State.

Table 30: Nasarawa State Cassava Production Figure for 1997-2014

S/N	Year	Crop	Production (000MT)	Area (000HA)	Yield (MT/HA)
1	1997	Cassava	736.05	57.55	12.74
2	1998	,,	754.71	60.28	12.52
3	1999	,,	338.19	36.92	9.16
4	2000	,,	250.00	25.00	10.00
5	2001	,,	144.21	12.83	11.24
6	2002	,,	240.00	23.00	10.43
7	2003	,,	204.67	19.16	10.68
8	2004	,,	242.42	22.04	11.00
9	2005	,,	1115.94	79.71	14.06
10	2006	,,	1276.62	72.37	17.64
11	2007	,,	871.12	61.08	14.30
12	2008	,,	995.86	67.57	14.74
13	2009	,,	1034.59	70.93	14.59
14	2010	,,	1480.59	98.91	14.97
15	2011	,,	1957.70	120.75	16.21
16	2012	,,	2464.14	125.88	19.57
17	2013	,,	2514.50	130.40	19.28
18	2014	,,	2544.90	129.80	19.61

Source: NADP PME Department, Lafia

The table above shows the output level of cassava in Nasarawa State. It is obvious that the production level of cassava keeps on increasing every year likewise the land area devoted to cassava production. In 2004 the production level is put at 242.42 MT and the

land area is 22.04 HA; in 2005 the production level is put at 1115.94 MT and the land area is 79.71HA; in 2006 the production level is put at 1276.62 MT and the land area is 72.37 HA; in 2007 the production level is drops to 871.12 MT and the land area 96.85 HA, the drop in production level could be as a result of inter ethnic crisis in the area but in 2008 production again picked up, it was put at 995.86 MT and the land area is 14.74 HA; in 2009 production level is put at 1034.59 MT and land area is 70.93 HA. The output levels keep on increasing due to state intervention in cassava production through the provision of finance and technical assistance, improved varieties, fertilizer and chemicals like herbicides, insecticides etc. In 2014 the production level is put at 2,544.90 MT and land area area is 129.80HA.

Question 2: What are the conditions of peasants before the cassava policy in the study area?

Agriculture is said to be the major preoccupation of people in the rural areas of Nigeria. The greater percent of the population is living in the rural area where subsistent economy is the practice (Aime, 2011). The mode of production is so crude and primitive that the produce is not enough to meet their food requirements and other needs such as clothing, shelter, and input to enhance production (Kure, 2002). One of the most important futures of rural environment is land. In Nigeria, land is not only the primary means of generating food but also the means to generate wealth. Rural environment is characterized by poor condition of living, high level of illiteracy, poor infrastructure, poor road network, poor or absence of health facility, high rate of poverty and general lack of social amenities. The rural people suffer poor health and have short life span (World Bank 1996). The table below shows the conditions of peasants in the study area

Table 31: Conditions of peasants in the study area

Conditions	Frequency	Percentage
Poor housing	45	11.9
High level of illiteracy	90	23.8
High rate of poverty	92	24.4
Lack of social amenities	150	39.7
Total	377	100

Source: Field Survey 2016

The table above shows that there is poor condition of living in the rural areas in the study area. It also shows that 11.9% of the sampled farmers have poor housing, high rate of illiteracy is 23.8%, high rate of poverty is 24.4% and lack of social amenities is 39.7% respectively.

Question 3: What are the conditions of peasants after the cassava policy?

Nigeria intends to achieve greatness in the area of food production, sound economy and infrastructural development. The country demonstrates this through policy on how agricultural and economic reforms can spur strong and viable economic growth and thereby reduce poverty. In 2004 report by the National Planning Commission shows that poverty has decreased to 54.4%. Government through development agencies targeted to reduce poverty and revamped the economy by pursuing certain policies which are incorporated in the National Economic Empowerment Development Strategy (Needs), Millennium Goals (MDGs), Small and Medium Enterprise Development Agency (SMEDA), and National Poverty Eradication Program (NAPEP) among others. Other strategies include aggressive investment in agriculture and agro-processing as well as pro-poor micro finance policies that are designed to make loanable funds available to relatively poorer Nigerians (Magnus, 2008)

Nigeria has implemented series of policies and programs targeted at improving the life of the rural dwellers and the national economy. Policies or programs such as Accelerated Food Production Program, River Basin Development Authority, Operation Feed the Nation, Green Revolution, Cassava Multiplication Programs, among others are implemented to promote food security and productive capacity of the country. Policy is said to be effective if it creates empowerment through safety windows and efficient delivery. These windows opportunities ensure mass involvement of the targeted population in the economic development of the country. The poverty alleviation programme is targeted at reducing poverty in Nigeria by the year 2020. The national cassava policy is aimed at providing food security, increase output, income, and well being of the primary producers. The government policy of using 10% of cassava flour and 90% wheat for bread production is aimed at conserving foreign exchange and encourage industrial utilization of cassava in Nigeria. It is targeted that with 10% cassava substitution government will save about US$40 million which can be injected in to the Nigerian cassava industry. The tables below shows the impact of cassava production on the wellbeing of peasants after the policy in the study area.

Table 32: Distribution of respondents according to the wellbeing of peasants in cassava production, 2004

Wellbeing		Frequency	Percent
Valid	Motor Cycle	52	13.79
	School/Medical fees	54	14.32
	Shelter	68	18.03
	Food	66	17.51
	Clothing	67	17.77
	Married more wives	64	16.97
	Car	06	1.59
	Total	377	100

Source: Field survey 2016

From the table above, 52 (13.79%) of the respondents said that they bought motor cycle from the money they realized from cassava production, 54 (14.32%) paid school/medical fees of their children, 68(18.03%) built their own shelter, 66 (17.51%)said that cassava production provided them with food security, 67 (17.77%) cloth themselves through the money they realized from cassava production, 64 (16.97%), said that they were able to marry more wives and 06 (1.59%) were able to buy car in order to add value to themselves, family and enhanced further production. In summary, it shows that cassava farmingis profitable particularly to those peasants that are aware of the policy in Nasarawa state.

Table 33: Distribution of respondents according to the wellbeing of peasants in cassava production, 2005

Wellbeing		Frequency	Percent
Valid	Motor Cycle	68	18.03
	School/medical fees	54	14.32
	Shelter	52	13.79
	Food	66	17.51
	Clothing	67	17.77
	Married more wives	64	16.97
	Car	06	1.59
	Total	377	100

Source: Field survey 2016

From the table above, 68 (18.03%) of the respondents said that they bought motor cycle from the money they realized from cassava production, 54 (14.32%) paid school/medical fees of their children, 52(13.79%) to have their own shelter, 66 (17.51%) said that cassava production provided them with food security, 67 (17.77%) cloth themselves through the money they realized from cassava production, 64 (16.97%), said that they were able to marry more wives and 06 (1.59%) were able to buy car.

Table 34: Distribution of respondents according to the wellbeing of peasants in cassava production, 2006

Wellbeing		Frequency	Percent
Valid	Motor Cycle	54	14.32
	School/medical fees	52	13.79
	Shelter	66	17.51
	Food	68	18.03
	Clothing	67	17.77
	Married more wives	64	16.97
	Car	06	1.59
	Total	377	100

Source: Field survey 2016

From the table above, 54 (14.32%) of the respondents said that they bought motor cycle from the money they realized from cassava production, 52 (13.79%) paid school/medical fees of their children, 66(17.51%) have their own shelter, 68 (18.03%)said that cassava production provided them with food security, 67 (17.77%) cloth themselves through the money they realized from cassava production, 64 (16.97%), said that they were able to marry more wives and 06 (1.59%) were able to buy car.

Table 35: Distribution of respondents according to the wellbeing of peasants in cassava production, 2007

Wellbeing		Frequency	Percent
Valid	Motor Cycle	52	13.79
	School/medical fees	54	14.32
	Shelter	68	18.03
	Food	66	17.51
	Clothing	67	17.77
	Married more wives	64	16.97
	Car	06	1.59
	Total	377	100

Source: Field survey 2016

From the table above, 52 (13.79%) of the respondents said that they bought motor cycle from the money they realized from cassava production, 54 (14.32%) paid school/medical fees of their children, 68(18.03%) have their own shelter, 66 (17.51%)said that cassava production provided them with food security, 67 (17.77%) cloth themselves through the money they realized from cassava production, 64 (16.97%), said that they were able to marry more wives and 06 (1.59%) were able to buy car.

Table 36: Distribution of respondents according to the wellbeing of peasants in cassava production, 2008

Wellbeing		Frequency	Percent
Valid	Motor Cycle	52	13.79
	School /medical fees	54	14.32
	Shelter	60	15.91
	Food	66	17.51
	Clothing	67	17.77
	Marry more wives	64	16.97
	Car	14	3.71
	Total	377	100

Source: Field survey 2016

From the table above, 52 (13.79%) of the respondents said that they bought motor cycle from the money they realized from cassava production, 54 (14.32%) paid school/medical fees of their children, 60 (15.91%) have their own shelter, 66 (17.51%) said that cassava production provided them with food security, 67 (17.77%) cloth themselves through the money they realized from cassava production, 64 (16.97%), said that they were able to marry more wives and 14 (3.71%) were able to buy car.

Table 37: Distribution of respondents according to the wellbeing of peasants in cassava production, 2009

Wellbeing		Frequency	Percent
Valid	Motor Cycle	68	18.03
	School /medical fees	54	14.32
	Shelter	52	13.79
	Food	66	17.51
	Clothing	67	17.77
	Married more wives	60	15.91
	Car	10	2.62
	Total	377	100

Source: Field survey 2016

From the table above, 68 (18.03%) of the respondents said that they bought motor cycle from the money they realized from cassava production, 54 (14.32%) paid school /medical fees of their children, 52 (13.79%) have their own shelter, 66 (17.51%)said that cassava production provided them with food security, 67 (17.77%) cloth themselves through the money they realized from cassava production, 60 (15.91%), said that they were able to marry more wives and 10 (2.62%) were able to buy car.

Table 38: Distribution of respondents according to the wellbeing of peasants in cassava production, 2010

Wellbeing		Frequency	Percent
Valid	Motor Cycle	52	13.79
	School /medical fees	54	14.32
	Shelter	68	18.03
	Food	66	17.51
	Clothing	67	17.77
	Married more wives	64	16.97
	Car	06	1.59
	Total	377	100

Source: Field survey 2016

From the table above, 52 (13.79%) of the respondents said that they bought motor cycle from the money they realized from cassava production, 54 (14.32%) paid school /medical fees of their children, 68(18.03%) have their own shelter, 66 (17.51%) said that cassava production provided them with food security, 67 (17.77%) cloth themselves through the money they realized from cassava production, 64 (16.97%), said that they were able to marry more wives and 06 (1.59%) were able to buy car.

Table 39: Distribution of respondents according to the wellbeing of peasants in cassava production, 2011

Wellbeing		Frequency	Percent
Valid	Motor Cycle	120	31.82
	School /medical fees	60	15.91
	Shelter	60	15.91
	Food	66	17.51
	Clothing	67	17.77
	Married more wives	04	1.06
	Car	-	-
	Total	377	100

Source: Field survey 2016

From the table above, 120 (31.82%) of the respondents said that they bought motor cycle from the money they realized from cassava production, 60 (15.91%) paid school/medical fees of their children, 60(15.91%) have their own shelter, 66 (17.51%)said that cassava production provided them with food security, 67 (17.77%) cloth themselves through the money they realized from cassava production, 04 (1.06%), said that they were able to marry more wives and non of the sampled farmers were able to buy car and this can due to inter and intra ethnic crises that erupted in the state.

Table 40: Distribution of respondents according to the wellbeing of peasants in cassava production, 2012

Wellbeing		Frequency	Percent
Valid	Motor Cycle	58	15.38
	School /medical fees	114	30.02
	Shelter	68	18.03
	Food	66	17.51
	Clothing	67	17.77
	Married more wives	04	1.06
	Car	-	-
	Total	377	100

Source: Field survey 2016

From the table above, 58 (15.38%) of the respondents said that they bought motor cycle from the money they realized from cassava production, 114 (30.02%) paid school /medical fees of their children, 68(18.03%) have their own shelter, 66 (17.51%) said that cassava production provided them with food security, 67 (17.77%) cloth themselves through the money they realized from cassava production, 04 (1.06%), said that they were able to marry more wives and non of the sampled farmers were able to buy car.

Table 41: Distribution of respondents according to the wellbeing of peasants in cassava production, 2013

Wellbeing		Frequency	Percent
Valid	Motor Cycle	58	15.38
	School/medical fees	58	15.38
	Shelter	68	18.03
	Food	66	17.51
	Clothing	67	17.77
	Married more wives	60	15.91
	Car	-	-
	Total	377	100

Source: Field survey 2016

From the table above, 58 (15.38%) of the respondents said that they bought motor cycle from the money they realized from cassava production, 58 (15.38%) paid school fees of their children, 68(18.03%) built their own houses, 66 (17.51%)said that cassava production provided them with food security, 67 (17.77%) cloth themselves through the money they realized from cassava production, 60 (15.91%), said that they were able to marry more wives and non of the sampled farmers were able to buy car.

Table 42: Distribution of respondents according to the wellbeing of peasants in cassava production, 2014

Wellbeing		Frequency	Percent
Valid	Motor Cycle	68	18.03
	School /medical fees	54	14.32
	Shelter	60	15.91
	Food	60	15.91
	Clothing	60	15.91
	Married more wives	27	7.16
	Car	52	13.79
	Total	377	100

Source: Field survey 2016

From the table above, 68 (18.03%) of the respondents said that they bought motor cycle from the money they realized from cassava production, 54 (14.32%) paid school /medical fees of their children, 60(15.91%) have their own shelter, 60 (15.91%) said that cassava production provided them with food security, 60 (15.91%) cloth themselves through the money they realized from cassava production, 27 (7.16%), said that they were able to marry more wives and 52 (13.79%) were able to buy car. In summary, it shows through cassava farming more were able to buy more cars and motor cycles to ease their lives and status in the state, cassava production should be encouraged in Nasarawa state because is profitable.

Cassava is important not only as a food crop but also as a major source of income for rural households. Nweke (1992) and (FAO, 2003), provides that about 42% of harvested cassava roots in West and East Africa are processed into dried chips and flour. As a cash crop, cassava generates cash income for the largest number of household in companion with other staple Nweke (1997).

In Nasarawa State, the record of cassava production shows that the total numbers of farm families' income in the production were 6621; total area devoted to cassava production was 175,880 hectares and the total output 2,464,140 metric tonnes (NADP, 2012).

Cassava has become one of the major staples food consumed both in the urban and rural areas in Nigeria generally and Nasarawa state in particular. It current production level in Nasarawa State is put at two (2) million metric tonnes and a total area harvested of the crop in 2012 was one hundred and seventy five thousand (175) hectares.

One of the implications posed by the National Cassava Policy is the issue of food security. It was observed that the prices of cassava products are very low. A tonne of cassava is sold for between N4000 and N5000 in 2002, and after it was sold for N6000 to N7000. This achieved at the detriment or neglect of other crops like maize, sweat potatoes, yam etc.The commercialization of cassava which the policy is promoting will tend to undermine food security for the peasants. Cassava is a seasoned crop, the only crop that is harvested and marketed all the times of the year. By this, peasants need large parcels of land to meet up with the market demand for the products. Much attention is given to the production of cassava to the neglect of other crops. The implication is that, cassava is presently overstretched as it is now used as a cash cropand food crop among the peasants. Thishas made it easy for the poor peasants to produce mainly for market.

According to IITA (2004), one innovative initiative to achieve greater cassava production is being undertaken by the cassava growers associations. Each parcel is intended to provide 1000 hectares of continuous land suitable for commercial cassava cultivation.

The expansion of land devoted to cassava requires some explanation. One of the major challengesis non- availability ofland.One of the way to avoid land problem is to shift attention to production of other crops. The production of rice, millet, sorghum and soya beans have drastically reduced by 75% rice, 10% sorghum, 70% soyabeans, 90% millet between 2002 to-date. The land meant for these crops have been devoted to the production of cassava which is destined for the market.

Obviously increases in the prices of cassava products will serve as an incentive to the primary producers of cassava in the study area. This may indeed lead to an intensification of surplus labour in order to achieve surplus products. Concentrating effortson cassava production is greatly affecting the production of other crops like sweat potatoes, coco-yam and yams in most parts of the state.The commercialization of cassava through this policy does not only bring about the cultivation of cassava for exchange, but it also promotes the commoditization of food stuff.

Question 4: What are your sources of income?

Table 43: Distributions of respondents according to sources of income

Sources of Income		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Cooperative	135	35.8	35.8	35.8
	Individual/Family	92	24.4	24.4	60.2
	Contributions (Adashi)	150	39.7	39.7	100.0
Total		377	100.0	100.0	

Source: Field survey 2016

According to the table above, source of fund generation for the farmers are through cooperative society 35.8%, through individual/family 24.4% and local contribution (Adashi) 39.7%. The data shows that farmers in the area have not been able to secure funds through government.

Question 5: Identify factors that will encourage cassava production in the study area?

Table 44: Distribution of Responses According to Factors that will Encourage Cassava Production in the Study Area

Factors	Frequency	Percentage
Improved varieties of cassava cuttings	80	21.2
Provision of fertilizer	72	19.0
Provision of financial and technical supports to farmers	72	19.0
Availability of land	53	14.0
Good pricing of cassava products	55	14.5
Good processing facilities	45	11.9
Total	377	100

Source: Field survey 2016

The result of the data analyzed above shows that 21.2% of the sampled farmers said provision of improved cassava cuttings will encourage cassava production in the study area, 19.0% fertilizer, 19.0% financial and technical supports, 14.0% availability of land, 14.5% good pricing of cassava products and 11.9% good processing facilities respectively.

Question 6: Has the state cassava policy encourages production for market not consumption?

One of the major characteristics of the capitalist mode of production is commodity production; the capitalist mode of production is one in which capital has penetrated and taken over production. That means that production is geared towards sale, and thus becomes commodity production. A commodity is a product made expressly for sale (Ake, 1983). Policies such as this operate objectively to intensify commoditization and thereby further incorporate the peasantry into the circuits of capital.

Attempt will be made to analysis how the national policy on cassava production is intensifying the commoditization in rural areas of Nasarawa State. With the commoditization of cassava, the labour of some of the rural producers is becoming more and more intensified without any commensurate increase in their living standard or wellbeing.

As noted earlier, the national policy on cassava production focuses on promoting the massive cultivation of cassava to serve the industrial needs of the state as well as earn foreign exchange. The massive production of cassava requires the use of modern agro-technologies and those who are not able to afford the use of these agro-technologies are marrying more wives to cope with the labour that is required. Presently, efforts are being intensified to lure farmers into using tractors, fertilizers, high yielding varieties, pesticides and herbicides to achieve high production. But, six years after the policy was formulated, not much of the above mentioned is being used by the peasants. Rather, peasants have so far commoditized their labour and are selling it to capital for their reproduction. Peasants are now used as instrument of labour by capital.

Question 7: Can state cassava policy brings about agro-industrialization?

One of the objectives of the cassava policy is to set up industrial utilization of cassava in Nigeria. The motive according to the Programme Coordinating Unit (PCU) (2005) is to put Nigeria in the global context for competition. By so doing, the country needs to up-grade the use of cassava into primary industries such as starch, ethanol, chips and flour in order to provide an industrial base for further diversification of the national economy (PCU, 2005). The use of modern technology in cassava processing which the policy envisages will reinforce dependency in Nigeria as the country will look up to the developed countries for its technological needs and repairs. Ruma (2005) observed that the cassava farmers in the country are not able to get market for the produce because of the constraints in deploying technology for processing cassava. That many farmers in the country went into large scale cassava farming since 2006 as a result of encouragement by the administration of former president obasanjo but two years later, the farmers are complaining of lack of market problem. He explained that, government has therefore taken cognizance of the fact that processing is another challenge which could strengthen the value chain that will enable the farmer leverage and stabilize price. It has been argued that in Africa any policy which focuses on the use of foreign technology and market designed to further intensify dependency. This will promote the economy of the developed countries as the country has to depend on them for the machines, spare parts and technical known-how.

The policy is systematically encouraging modern technology into farming activities in Nasarawa State. Peasant farmers may want to use technology like tractors, mechanized peelers, mechanized graters, motorized peelers etc but peasants lack the connection and finance to obtain them. When contacted one of them Mr Iliya Umbugadu of Akun complained that 'he don't have access to tractor and even the fertilizers are hardly seen, making mass production impossible. The rich peasants have access to modern inputs because of their connection to state power and financial influences. The poor peasants left behind and can not explore their productive potentials to the fullest thereby making them poor and deprived them of good living.

Question 8: How is Cassava processed in the Study area?

In many peripheral capitalist formations production is directly related with exchange. What is produced has to be preserved to increase the market value of the products. It is evident that whenever products are produced as commodities exchange becomes a necessary element of the process of reproduction. Exchange as a social transaction cannot be effective without good marketability. This is the most reason where preservation becomes an essential element of social reproduction.

Thus, cassava is highly perishable and harvested tubers must not only be processed but also preserved to avoid post harvest losses. Cassava processing is highly labour intensive; the traditional processing cassava include the use of traditional peeler, grater, press or screw jack, and local fryer and basket sieve; widely used improved cassava processing equipment include vibrating sieve, mechanical peeler, motorized grater, motorized drier, screw jack, hydraulic press; cassava products include Garri, Lafun (cassava flour), cassava starch, fufu (cassava dough) (pdfcast.org>technology-2008).Different types of cassava processing machines are produced locally such as cassava grater, sifter, watering press, garri fryers, cassava chippers, batch dyer, pelleting machines and cassava starch mill. These machines are used to produce garri, cassava flour, chip, tapioca, chink-wange, cassava beer, and pellet for livestock, bread and industrial gum. The products such as cassava chips, pellets, fresh tubers, and cassava gum have considerably export potentials (www.idosi.org/wjas/wjas4(3)/9.pdf.2008).

Cassava processing is constrained by a lack of steady supply of tubers throughout the year, high transport cost to processing centres, inadequate processing equipment and low returns from small-scale processing (Davies et al, 2008). Improvement of simpler household user-friendly technological methods that will enhance agricultural productivity and economic growth is therefore necessary; that the success of a given innovation requires an analysis of

the local situation and the creation of conditions that not only make the change feasible (Stella, 2008). Mechanization of cassava processing operations will enhance human capacity, leading to intensification and increase in production (Davies et al, 2008).

Table 45: Traditional and Improved Cassava Processing Technologies/Equipments

Processing stage	Traditional Technology	Improved Technology
A. GARI 1. Peeling	Knife made of bamboo, flint or metal	Mechanizer peeler, motorized peeler, hand peeler, hand rasper
2. Washing	Local calabash bowl	Aluminium tank
3. Grafting	Rough stone, prickly trunk of palms sheet/tin iron pieced nail on one side	Mechanized Grater, Motorized Grater, Hammed mill, disk grater, hand grater
4. Fermentation	Heavy stone on heavy weighted cloth or nylon bag	Batch fermentation in aluminum tank, locally made hydrolic or mechanical
5.Dewatering Processing	Heavy stone on heavy weighted cloth nylon bag (for several days)	Hydrolic jack press, screw press, parallel board press, upgraded trade press for few minutes
6. Sieving	Women baskets, suspended cloth pieces holding mash	Improved pulverizere.g drum sieve, rotating seize
7. Frying/Revasting	Cash iron pan over wood fire	Upgraded roaster, solar dryer, kiln type dryer
8. Sifting	Women basket	Improved pulverizer and sifter
B. LAFUN 1. Peeling	Knife made of bamboo, flint or metal	Mechanical peeler, motorized peeler, hand resper
2. Soaking	Local calabash	Aluminum tank
3. Pulverizing	Women basket	Improved pulverizer
4. Dewatering	Heavy stone on heavy weighted cloth or nylon bag	Hydraulic press, mechanical press
5. Drying	Cash iron pan over wood fire	Drum dryer, solar dryver
C. STARCH 1. Peeling	Knife made of bamboo	Mechanical peeler, cassava filter, motorized peeler
2. Washing	Calabash bowl	Aluminium tank
3. Grafting	Sheet or iron pierced with nail on one side	Power grater, motorized grater, disc grater
4. Dewatering	Heavy stone on heavy weighted cloth or nylon bag	Hydraulic press, screw press
5. Drying	Cash iron pan over wood fire	Engraved fryer, solar dryer
6. Packaging	Local jute bag	Scale polythene bag
D. FUFU 1. Peeling	Local knife	Hand peeler- (mechanized)
2. Washing	Local calabash bowl	Aluminium tank
3. Grafting	Rough stone	Motorized grater, rotatary grater
4. Dewatering	Heavy stone on heavy weighted cloth	Mechanized press, hydraulic press
5. Packaging	Local jute bag	Hydraulic polythene bag

Sources; Journal of International Women's Studies Vol. 9 May, 2000

Traditional cassava processing technologies is labour intensive; improved cassava processing technologies need to be intensified. Mechanization of cassava processing operations will enhance human capacity; the present upsurge experience in the demand of

cassava products both locally and abroad has begun to overshoot the price of garri which is the most popular food derived from cassava; poor quality of locally produced cassava products has been traced to problem associated with peeling, grating, milling, dewatering, toasting, and sifting which are labour intensive, garri processing takes an average of 90 hours to process 100kg of garri per person; that 65% of the total time could be spent on peeling and 25 percent in roasting; to alleviate some of these problems encountered by traditional processors, various processing machines are developed for these operations such as peeling, grating of various size, pressing, sieving, frying, chipping, and milling (www.idosi.org/ujas4(3)/9.pdf,2008).

Table 46: Summation of cassava processing machines observed during study

Machine type	Total observed zone 1 – (Ukya&Karmo)	Total observed zone 2 – (Akun&Ancho)	Total Observed Zone 3- (Adudu &Shabu)	Total Observed Machines	Observed machines (%)
Peeler	1	-	-	1	0.5
Washing	2	3	1	6	3
Grater	18	28	29	75	34
Presser	16	27	30	73	33
Chipping	1	-	6	7	3
Sifting	2	4	4	10	4
Slicing	-	-	-	-	-
Frying	1	-	-	1	0.5
Drying	-	-	-	-	-
Milling	20	16	14	50	22
Total	61	78	86	223	100

Source: Field survey, 2016

In the above table a total of 223 cassava processing machines were observed, a large proportion of grater machines represented by 34% were observed, pressers (dewatering machines) represented by 33% were observed while milling machines represented by 22% were observed. Peeling operation was highly manual where women and children use knife to peel cassava; frying and washing machines were temporarily abandoned because of the high cost of operation.

Question 8: How many processing centres do we have in the study area?

Table 48: Summary of ownership of processing centres in the study areas

Ownership	Frequency	Percentage (%)
Individual	68	66.0
Government	10	9.7
Non-Government	1	0.9
Cooperative Societies	24	23.3
Total	103	100

Source: Field study 2016

In the above table, large proportion of the processing centres were owned by the individuals with 66%; government owned 9.7% while 23.3% were owned by the cooperative societies and 0.9% by the Non-governmental organization.

Question 9: Mention the names of cassava products you consume most in the study area?

Table 49: Distribution of Responses According to the Names of Cassava Products Consume Most in the Study Area

Products	**Frequency**	**Percentage**
Gari	203	53.7
Alubo	69	18.3
Akpu	65	17.2
Roasted cassava	20	5.3
Boiled cassava	20	5.3
Total	**377**	**100**

Field Survey 2016

From table above 53.7% of the sampled farmers consume gari, 18.3% consume alubo, 17.2% consume akpu, 5.3% consume roasted cassava and 5.3% consume boiled cassava respectively. This indicates that majority of the respondents consume gari more than any other cassava product in the study area.

Question 10: How is gari processed in the study area?

Gari is one of the major and common cassava products in Nasarawa State. Its production process involves simple operation. Gari production involves peeling, washing, frying, sifting and drying cassava fresh roots. Traditional cassava processing technologies like knife, rough stone, nylon bag, woven basket and local jute bag were used in gari production. Cassava roots are peeled with knives and washed repeatedly to remove sand and other dirt. The washed cassava roots is then soaked into the water for two (2) days in case of cassava flour and three (3) days in case of gari for fermentation, squeezing, granding, sieving, sun drying and packaging. This analysis of gari processing is presented in the chart below:

Gari Processing Flow Chart

Cassava roots

Peeling

Washing

Soaking

Squeezing

Granding

Sieving

Frying

Sun drying

Packaging

Labour requirement

(a) Traditional processing equipments

-Knife

-Rough stone

-Prickly trunk of palms sheet

–Nylon bag

–Woven basket –Local jute bag

(b) Improved cassava processing equipments

-Rotating sieve

–Hydraulic jack press

–Mechanized peelers

–Mechanized grater

–Motorized peeler

-Hand peeler

–Hand resper

-Cassava filter

–Solar dryer

– Improved pulverizer

–Aluminium tank

(c) Time/Day for fermentation

–Gari three (3) days

–Flour two (2) days

(d) Estimated capital requirement/cost of production

One bag of fresh cassava roots is sold for N2,500, a huge amount of money will be required to purchase improved cassava processing equipments or machines like mechanical grater, mechanical peeler, solar dryer and many more.

(e) Marketability

(a) Local market

(b) District market

(c) International market

Source: Field Survey 2016

5.3 Focus Group Discussion

The Focus Group Discussion (FGD) sessions were designed to generate qualitative data to complement the quantitative data in the survey. For the purpose of conviniency, the study selected six (6) persons per group for the Focus Group Discussion session. Therefore, the analysis and discussion here were based on responses of the respondents in each study site. The respondents were chosen from the lists in each study area or site using table of random numbers. This was done to compliment the data collected through the interview.Data generated from the FGDs revealed the challenges and experiences of peasant's farmers in cassava production vis-a-vis government policy and intervention in cassava production in Nasarawa State, Nigeria and they are presented as follows:

Question 1: What is your motivation in cassava production? Why do you engage in cassava production?

According to the participants, one of the major cardinal motivation or reason they engaged in cassava production "is to do something in order to feed themselves and families". Most men including women, the rural dwellers in particular, never went beyond production of food including cassava for their family (subsistence farming). Also some participants were of the view that they engage in cassava production for income generation. But today, the story is changing gradually, in that both men and women are now playing important roles in the society as producers of goods and services in the economic sphere. "So many burdens are

on the peasants according to culture, if the home is good it's the responsibilities of the man in particular and woman even though she may not receive the credit, to provide for the needs of the family.

Peasants tend to accept their roles such as breadwinner and house-keeping because that is what society expects of them and that is also what they have been socialized to accept according to their culture. According to the participants, peasants' motivation is a cultural construction.

Question 2: Has cassava farming beneficial to you?

The entire participants agreed that cassava farming has been very beneficial to them as individuals, households and as a community. According to them, of course, it is through cassava farming that they make their living. Not only has that, their lives depended on it. In the reality of today, cassava farming is one way of ensuring food security. The issue is that farmers has to be 'up and doing', it takes extra effort, and hardwork. Cassava production provides them with food, they consume cassava as garri, akpu, alebo, they pound cassava and even use cassava leaves for soup and use money from the sale of cassava and cassava products to satisfy their basic needs.

The issue is how to effectively manage cassava farming beyond the level of subsistence so that it can actually contribute to foreign exchange earning in order to improve the nation economy.

Question 3: What are your challenges/problems as a cassava farmer?

To be sincere, cassava farmers faced many challenges, which deter their production level. For example, farmers are challenged by lack of modern technology, imputs/improved cassava cuttings, training and necessary support from the government.

In the words of the participants, "we need finance, fertilizer, tools, we don't add value to our cassava". "I am not happy with the cassava my farm is yielding" a 61-year-old, Mallam Musa Mamam, Mai Anguwa Ombi ii, Shabu told the researcher. "I don't use fertilizer. I need financial help to improve my yield"

Another farmer said he needs better tools. Unable to afford machines to do heavy work, small farmers use hoes and matchetes to harvest their crops.

The most illiterate farmers have scarce funds to buy fertilizers or pesticides and often cannot access resources to learn better cultivation methods. As a result, cassava output in sub-Saharan Africa stands at 10 tonnes per hectare, far below potential yields of more than 30 tonnes.

Decades of neglect of the farming industry will have to be overcome quickly if the nation of about 170 million people is to dodge an impending food crisis due to a reliance on rice and wheat imports.

Labour is essential process of production. It has three basic components: labour power, subject of labour and instruments of labour. The interrelationship between these processes is important in understanding the level of production.Farmers in the areas suffer availability of labour. The participants actually believe that these challenges will limit cassava production. If these challenges are addressed or minimized, we may have little difficulties, in producing more cassava. In Nigeria, and particularly Nasarawa State, these challenges particularly funding has actually impose limitations on cassava production. Nasarawa State does not make enough provision for cassava farmers

All the participants feel that their levels of production are limited because of lack of support from the government. This agreed with (Davies, 2008), that cassava processing is constrained by a lack of steady supply of tubers throughout the year, high transport cost to processing centres, inadequate processing equipment and low returns from small-scale processing. Improvement of simpler household user-friendly technological methods that will enhance agricultural productivity and economic growth is therefore necessary; that the success of a given innovation requires an analysis of the local situation and the creation of conditions that not only make the change feasible (Stella, 2008). Mechanization of cassava processing operations will enhance human capacity, leading to intensification and increase in production (Davies, 2008).

Question 4: Is availability of land a constraint on cassava production?

All the participants agreed to the fact that availability of land has indeed constitutes a constraint to cassava production. Many farmers cannot access land for farming for various reasons. Many farmland has been turned to government structures, road constructions have deprived many and reduced farmland without adequate

compensation from the government.

Farmers have sold their land arbitrarily and land prices have increased such that money to buy it is not available. This agreed with the position of (Omokere, 2007) that money and power had become the strongest means of acquisition of any size of land. Several of the participants were of the opinion that farmland has been used for residential/office buildings, road and other constructions. According to them, recently, the Nasarawa State Government has taken over farmland in order to construct Cargo Airport around Shabu, Kwandere area.

It is unfortunate in Nigeria we have a culture of embarking on white elephant project that will soon be abandoned, leading to displacement of farmers and not achieving the purpose of which it intended. Their view agreed with Ega (1980), Omokhudu (1988), which observed that, Nigeria has an abundant cultivable land area of about 71.2 million hectares, only 34 million or about 50% is put into cultivation. Availability of land for farming will enhance agricultural transformation.

Question 5: How can government policy influence cassava production?

Actually government policy or participation if properly implemented and follow-up will definitely increase cassava production. Most atimes government are supposed to show direction and come up with plans in order to assist farmers attain their potentials and by extension ensuring food security and improve economy. But these policies are either not initiated or haphazardly implemented thereby failing to bring necessary changes desired. All participants were of the view that government intervention through concrete policy will go a long way in increasing agricultural production particularly cassava production. Examples were given when government actually played active role in agriculture in the 70s that there was enough food in the nation and even for exports. Poor implementation of policies starting from the 80s has led to the state of food insecurity and the country now export all what can be produced locally from food to toothpick. They are of the view that proper implementation of policy and creating awareness for mass participation will definitely influence cassava production.

One of the major focuses of policy is production for exchange. That means that production is geared towards sale, and thus becomes commodity production. A commodity is a product made expressly for sale (Ake, 1983). Policies such as this

operate objectively to intensify commoditization and thereby further integrate rural economy to the world system of capitalist appropriation.

The new policy on cassava production is intensifying the commoditization in rural areas of Nasarawa State. With the commoditization of cassava, the labour of some of the rural producers is becomingmore and more intensified without any commensurate increasein their standard of living.

As explained above, the new policy on cassava production focuses on promoting the massive cultivation of cassava to serve the industrial needs of the state as well as earn foreign exchange. The massive production of cassava requires the use of modern agro-technologies and the poorpeasants who could notafford the use of these agro-technologiesresortedto marrying more wives to overcome the labour that is needed. Mall Kabiru Omaiza a cassava farmer in Shabu said 'I had good harvest in 2006 when I used the TMS varieties of cassava cuttings provided by state government and the money I got married two more wives Lady and Talatu to expand my cassava farm since I don't have enoughmoney to buy tractor or other modern equipments'.

In recent time great efforts are being made to persuade farmers into using tractors, fertilizers, high yielding varieties, improved cassava cuttings, pesticides and herbicides to achieve massive production. But, some years later after the policy was implemented, the result has been poor if quantified with expected target of the policy. What we saw that the poor peasants in cassava production already commoditized their labour and are selling it to the rich peasants for their reproduction. Thiscondition has made life difficult for the poor peasants in the state.

Also as part of the policy is to subsidize farm inputs like fertilizer to boost cassava production. This does not go down well with the poor peasants in Nasarawa state. This because despite government subsidy on fertilizer the prices of fertilizer have remained high during the period. The implication of commoditization of fertilizer is that it reduces yield because of the poor nature of the soil in the study area.

Question 6: Are you aware or have you benefited from any government intervention or programmes as a cassava farmer?

As a matter of fact, majority of the participants are not aware of government policy on cassava production. Some were of the opinion that whatever government is saying and doing about cassava production has not reached their areas "Ba sainiba" (we

are not aware) ‘Ba n jiba”. (We did not here about it) Some said they cannot read or hear the language used in the media. Actually, they are ignorant of government policy on cassava production. On the other hand there are some of the participants that claimed to be aware of government policy on cassava through friends, neighbours and distant relations from the cities. On the issue of whether they have benefited from government intervention/programmes on cassava production, it is quite unfortunate that many farmers are not aware of programmes on cassava production, not to talk of benefiting from it; this may be attributed to the level of education of the farmers in the area. Mostly they are illiterate, and means of communication did not consider their peculiarities. In the group discussion only few agreed they have benefited from government intervention even though not to the level that can bring significant change to their level of production. For Auta Birki a traditional holder in Karmo who is aware of the cassava policy said ‘i benefited from cassava production, in 2006, i build my first house with cassava money and renovated our family house in Karmo’. Another respondent the village head of Ukya Mallam Masa Yerima said ‘i paid my children school fees, my wife hospital bills and even bought a Pick up van with cassava money in 2007’ i achieved all these because i am aware of the cassava policy, government gave me improved cassava cuttings’. One cassava farmer in Adudu Mr David Ishowa said ‘ i feed my family with cassava products like akpu, gari, alubo and even sell gari and alubo in Lafia market and the money i got from the sale i use it to solve my daily problems and pay children school fees’.

Life would have been much easier, if government institutions can give consideration to local farmers, issues of low interest credit facilities, and other facilities that can enhance their production level should be addressed.

Group Discussion with the Officials of the Ministry of Agriculture and Nasarawa Agricultural Dedvelopment Proogramme, Lafia

This is concerned with the provision of answers to questions by the staff of the Ministry of Agriculture and Nasarawa Agricultural Development Programme, Lafia. This is done in order to get views of the Minnistry and agency that are regulating the activities of food production particularly cassava in the state. Data collected from this section involves government intervention in cassava production, and challenges of cassava production.

Question 1. Why government intervenes in cassava production in Nasarawa Sate?

According to Mr. Steve Kpama Jao, Managing Director Nasarawa Agricultural Development Progrmamme “one major reason government intervenes in cassava production is to promote food security, diversify state economy and improve its revenue base”. Another participant Hajiya Hafsat a staff of the Ministry said “government intervenes in cassava production to reduce rural hunger and poverty in the state...cassava is one crop that can be transformed into different products like gari, alebo, cassava starch, cassava flour among others. That government needs to internenes in order to maximize the potentials of cassava production by adopting the national cassava policy in the state.

Question 2. What is the level of involvement of government in cassava production?
Cassava production received a boost with the introduction of national cassava polcy in Nasarawa State. A total of 175,888 hectres of land was devoted to cassava production and the current production level is put at 2,464,140 metric tons in 2010. According Mr. Kpama Goverment gives loans to farmers in cassava production, supplies them with improved cassava cuttings, and procures about 5,442 liters of agrochemicals and distributed to farmers in the state boost their production. That information gets to the farmers through government officials, village heads, local officials and friends.

What then are the Government Initiatives on Cassava Production in the study area?

Nasarawa state government is farmers friendly. The state offers a lot of supports and assistance to the farmers in terms of policy measures, credit facilities, inputs, marketing and extension services.

Extension Services Initiative

Agricultural information passes from sources of generation to farmers through media such as extension workers, academic institution, co-oprative societies, agro-allied industries, Agricultural Development Projects, Ministry of Agriculture, radio, television etc (Ekoja, 2003). Agricultural information creates awareness among farmers about agricultural technologies for adoption (Agbamu, 2006).

Therefore, extension is a type of education which is functional rather than formal. It is better provided by extension workers whose main task is to convey information in meaningful form to farmers. One of the ways they do this is by training a group of model farmers with the hope that such farmers come in contact with other farmers. This perhaps is necessary because farmers out number available extension workers with the present ratio of 1:3000 (Bello, 2007).

Nigoku (1991) observes that extension agents are the main sources of farmer's information on improved technologies and are also responsible for educating farmers on the use of improved technologies. Agbamu (2000) argues that participation of agricultural extension workers in adaptive research trials allows them to become familiar with the technologies they are expected to promote and also helps to ensure that the sociological dimensions of farming are not neglected in the recommended improved farming practices.

With technological advancement, agricultural extension agencies have come to embrace the use of mass media organizations for effective information dissemination of improved agricultural technology from research centres to farmers for sustainable productivity (Camble, 1992). In line with the national policy on agriculture in Nigeria, various communication media are being used to transmit agricultural innovation to farmers e.g. radio, television, newspaper, farm magazine, news letters, folders, leaflets pamplets (Camble, 1992).

In Nasarawa state extension workers pass information to the small scale peasants through demonstrations, video-taping, verbatim accounts with the farmers, individual contact, group contact and community contact. Demonstrations are the most effective means of convincing the farmers to see practical results. Mass media method like posters, radio and television has the ability to reach large numbers of farmers at the same time with same information within a short period of time.

Bello (2007) argues that 66.70 percent of the extension workers of the Nasarawa State Agricultural Development Programme (NADP) expressed dissatisfaction with their mobility arrangement by the (NADP) while 63.3 percent of them claimed of lack of personal means of transportation. He goes further to report that most of the farmers leave home as early as 7.30am for their farms and come back around 7.30pm. Therefore,

the programme presented in the morning cannot be accessible to the farmers. Also Orivel (1983) reports that failure to provide transportation was one of the main causes of extension staff effectiveness. He adds that under remuneration of extension staff contributed immensely to lack of motivation and quick turnover of extension staff with ultimate poor level of performance.

The overall lack of information among small scale peasants are caused by the high rate of illiteracy and poverty. Atala (1992) posits that, modern farm inputs are needed to raise small farm productivity. These inputs may include fertilizer, improved variety of seeds and seedlings, feeds, plant protection chemicals, agricultural machinery, and equipment and water.

Agricultural Credit Initiative

Agricultural credits are sorts of loans and advances granted borrowers to finance and service production activities relating to agriculture, fisheries and forestry and also for processing, marketing, storage and distribution of products resulting from these activities (Timothy and Diamond, 2000). Small scale farmers are among the potential beneficiaries of agricultural credit in Nigeria but because of their low level of literacy they are mostly unaware of existing loan facilities. To reap the benefit of credit farmers need information relating to source of loan such as names of lenders, location and types of existing credit sources. They need information on the term of loans such as interest rates, loanable amount and mode of repayment (Falusi and Ade).

Information regarding agricultural credit gets to small scale farmers usually through channels such as relations, friends, neigbours, government officials, commercial and credit banks. Grassroots organs such as village heads and local government officials are used to diffuse such information because of their personal touch with small scale farmers. Extension agents need to intensify their effort in educating farmers to increase their level of awareness (Agbamu, 2000).

Agricultural Technology Initiative

Technology involves the use of modern inputs in food production. Agricultural technology for small scale farmers enhances their productivity. The farmer needs information on production technology that involves cultivating, fertilizing, pest control,

weeding and harvesting. This sort of information is at the moment being diffused by extension workers, government parastatals and agricultural equipment dealers (Chikwendu, 1996).

Marketing Initiative

Marketing involves the movement of products from the point of production to the point of consumption. The farmer market information needs are those that enable him make rational and relevant decisions. Market information services have the function of collecting and processing marketing it available to market participants in a form relevant to their decision making (Ozowa, 1995).

Market information needs of small scale farmers include:

. Information on product planning. This is information on what crop and variety to grow at a given season with marketability of such a crop as an important deciding factor.

. Information on current price

. Information on forecast on market trend, This type of information assists farmers in planning their market products.

. Information on sales timing. This assists farmers in ensuring that they do not cause a market glut. It enables them stagger harvesting and quantity for marketing.

. Information on improved marketing practices. It includes information on improved harvesting methods. This information is distributed by field level extension worker by demonstration on farmer's field, at local and wholesale market.

. Information on group marketing. This enables small scale farmers to have organized sales of marketable surplus and bulk transport to produce.

Policy Initiative

Nasarawa state adopted the national policy on cassava production. The state implemented the National Cassava Multiplication Programme, RTEP and National Cassava Initiative to promote cassava production. The state supports the cassava farmers with improved cassava cuttings, yam minisett, sweet potato vine, coco yam corms and chemicals. In addition, 13,900 bundles of improved cassava cuttings; 3337.5 bundles of sweet potato vine, 14,000 yam minisett and 68.4 tons of coco yam corms were distributed to a total of 182 farmers in Nasarawa state (NADP, 2010).

The "Badakoshi" Farm Settlement Scheme in the state encourages food

production through the provision of tractors, chemical, fertilizer, seedlings and loans to the farmers. The Nasarawa State Government has spent millions of naira on agricultural production between 1997 to 2006. The state apart from the payment of extension worker salaries also released the sum of 178 million naira to Nasarawa State Agricultural Development Programme for its activities. It procured and distributed 5,442 liters of agro-chemicals and 4,304 metric tons of improved seeds to the farmers throughout the state at cost, recovery rates between 1996 to 2006. Governor AliyuAkweDoma under the BadaKoshi Agricultural Scheme in 2010 presented a loan package of N500 million to a total number of 736 farmers; not less than 150 new tractors were also distributed to deserved farmers in addition to other farm inputs; and to add to the gesture of the State Governor in his desire to make tractors available and accessible, authorities of the 13 Local Government Councils in the state contributed three tractors each to support the scheme (NassarawaNewslink magazine, 2010).

Question 3. Is the cassava policy effective or not effective?

The participants generally agreed that cassava policy is effective. Mall Suleiman of the public relation unit of NADPsaid cassava growers who enjoyed their empowerment testified that policy is effective. The can only be achieved if majority of the cassava growers are educated about the policy.

Question 4. What are the challenges of cassava production?

According the participant cassava production with a lot of challenges. The first challenge is funding. Other challenges are lack of processing and storage facilities, poor road and communication networks and lack of market for cassava. According to Mr. Kpama the challenge of fund affect full implementation of the policy, cassava is wasted because of poor road network, storage facilities and poor marketability of cassava and cassava based products.

5.4 Summary of Findings

From the findings of this study, it has been established that:

1. Education plays a major role in cassava production in the study area.
2. The study has also established that investing in cassava production enterprise is profitable.
2. Lack of synergy between government and the rural people were some of the constraining factors to low output in cassava production by the rural farmers.

3. The study described peasants as part of awkward class depended solely on the use of crude implement like hoes and cutlasses, which engaged in fragmented landholding and produced food mainly for consumption.
4. Land was used for other purposes rather than agricultural production in the study area.
5. Land is acquired through the government and peasants are moved out of the land to be developed. The study shows that there is persistent conflict between customary rights of usage particularly when settlers are moved to settle in an area that is formally occupied by other set of people.
6. Cassava production is dominated by small scale producers, cultivating on small and fragmented holdings using a backward form of technology in Nasarawa State.
7. Shortage of labour supply due to rural-urban drift.
8. Inter and Intra ethnic crises has displaced farmers from their farmland thereby affecting cassava production in the study area.
9. Peasant farmers faced various challenges in cassava production ranging from lack of credit facilities, improved cassava cuttings, fertilizers and tools.
10. Low level of awareness of government policy on cassava production in the area under study.
11. Implementation of government policy on cassava production is slow in reaching the targeted population.
12. Government policies on cassava production are designed to favour thepolicy makers not the peasants. That government policies change names but they never change the conditions of the primary producers.
13. Effective implementation of national cassava policy will about agro-industrialization in the study area.

CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATION

6.1 Summary

Peasants are faced with issues of inadequate capital, the right type of technologies and accesses to extension services which will increase their productivities. The study suggest that government should intervene in providing peasant farmers with incentives such as providing capital and processing equipment with a view to empowering them in cassava processing and marketing because peasant farmers have the potential of reforming the state economy from poverty stricken state to vibrant economy. The study suggests that investing in cassava production enterprise is profitable.

The study described peasants as part of awkward class depended solely on the use of crude implement like hoes and cutlasses, which engage in fragmented landholding and produced food mainly for consumption. Land is acquired through the government and peasants are moved out of the land to be developed. Experiences have shown that there is persistent conflict between customary rights of usage particularly when settlers are moved to settle in an area that is formally occupied by other set of people.

It is obvious that the agrarian sphere in Nigeria is composed of different isolated small scale producers, cultivating on small and fragmented holdings using a backward form of technology but the large and medium scale producers use modern technology like tractor, plough, motorized peelers among others in the production process.

This study has the potential to lead to a substantial reform in the way that policies/programmes are formulated and, thus, on their impact on the cassava production among peasant farmers. Making an effective case for change will require a great deal of additional work to allow us to identify specific problem areas and potential solutions. This effort, in concert with other reforms directed at agricultural production (cassava production in particular) offers hope of achieving an inclusive progression that maximizes cassava potentials for national economy.

In general, both formal and informal policies that will help peasant farmers, address the challenges they face in trying to increase their cassava production. Formal policies (e.g. access to loan facilities, fertilizers, tools and machineries, availability of land) are held responsible for the perceived reasons why there are low productions of cassava in the areas

under study. Selected strategies which follow must be incorporated into the policies and activities of the government to accomplish this endeavour and provide support for the peasant farmers in enhancing cassava production.

6.2 Conclusion

To make any reasonable analysis of the production process in cassava production, it will be important to know the structure of land holdings, the instrument used in the production process, the nature of exchange and production relations that have occurred among the peasants. All this affects agricultural productivity. The nature of production relations in Nigerian agriculture is reflected in the form assumed by the structure of land-holding, the level of development and distribution of the instruments of labour and the way in which the products of labour are appropriated.

The new policy on cassava production is an attempt to engage the peasantry into production relation with capital (Oibie, 2000). The new cassava policy can thus be envisaged as government decision not only to empower the peasants economically but also to improve their living standards through mass production, effective pricing and marketability of cassava products.

It is obvious that the World Bank, Federal and State governments contributed financially toward the objectives of the agricultural development project in Nigeria. But those entrusted with ADPs funds could either divert it for personal use or misappropriate the funds. Also, though the programme may help to raise cassava production, this will be achieved at the expense of marginalizing and pauperizing the majority of the rural population. it is argued that commercialization of cassava may tend to encourage the further incorporation of the peasantry into commodity relations. This will have the effect of intensifying the labour of peasant households to maintain or increase the supply of cassava in industrial capital without a commensurate increase in their incomes and welfare and thereby intensifying rural poverty.

Apart from intensified commoditization which the new cassava initiative may bring about, another consequence of the programme may be the exacerbation of social inequalities and social differentiation within the peasantry. As Lappe and Collins (1977) observe, programmes of this nature in a developing society tend to encourage the emergence of a new class of capitalist farmers who will tend to dominate the politics of the state and control the rural population.

Another issue raised in this study is that of food security. The commercialization of cassava which the initiative is promoting will tend to undermine food security for the peasantry. This will tend to intensify the food crisis and undermine the health and nutritional status of the peasantry. In the area of dependency, the study concludes that the programme will compound the problem of dependence. In addition, mechanization of cassava production being promoted by the new cassava policy will tend to promote further incorporation of the peasantry into the circuit of the international capitalist system. Our conclusion is that although the new national cassava drives may enhance the Nigerian cassava industry which will generate the nation's economic growth this will be achieved at the expense of marginalizing and pauperizing the majority of the peasantry.

Throughout this study, the researcher has attempted to share the concern peasant farmers have expressed as they attempt to increase cassava production in the state. With the suggested strategies below, peasant farmers can begin to consider how they can remedy some of the issues surrounding the challenges of cassava production.

Cassava is one of several crops in Nigeria that have been neglected partly due to the advent of petroleum, inconsistency of government agricultural programmes and policies and corruption. So any attempt to neglect general agriculture and isolate one or two crops for development is an exercise in futility (Soetan, 2005). Agricultural problems need holistic approach to solve them. For any agricultural development programme to succeed, it must aim at achieving the objective of equality of access to opportunities and equal distribution of incomes.

6.3 Recommendations

This study calls for specific recommended actions corresponding to the research findings, they are discussed below.

1. Establishment of an agricultural credit guarantee scheme to provide guarantee for agricultural loans granted by commercial and merchant banks.
2. Educate the masses of the people on the need for self-reliance and self- sufficiency in food production;
3. Improve the poorly co-ordinated past agricultural policies and programmes with a wholistic approach in which existing social, economic, institutional and organizational factors inhibiting rapid agricultural development are identified and tackled in an integrated manner;

4. Mobilize the abundant land, water and manpower resources of the country towards the effective and efficient food production.
5. To ensure a deeply rooted and self-sustaining development process based on effectively mobilized mass participation, starting from the grassroots and encompassing the entire nation thereafter (CBN, Annual Report and Statement of Accounts, 1986:28).
6. Modernized production and create an agricultural sector that is responsive to the demands and realities of the Nigerian economy in order to create more agricultural and rural employment opportunities, which will increase the income of farmers and rural dwellers.
7. Protect all prime agricultural lands for continued agricultural production.
8. Extension agents need to intensify their effort in educating farmers to increase their level of awareness (Agbamu, 2000).
9. The study recommended that the need for group formation among peasant farmers to enable them have a greater voice in term of decision making process on land ownership and easy access to credit facility.
10. The study recommended that farmer should form cooperative for easy access to credits and farm inputs as well as adequate information on new farming practice innovation by research stations.
11. The study recommended that government policy and intervention in cassava production should be extended all the nooks and cranies of in the state.

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APPENDIX I

Data Collection Instrument

BENUE STATE UNIVERSITY, MAKURDI

DEPARTMENT OF POLITICAL SCIENCE

THESIS RESEARCH QUESTIONS

INTRODUCTION

Dear Sir/Madam

Good day, I am a Ph.D Student in the Department of Political Science, Benue State University, Nigeria. I am conducting a research on the Impact of Cassava Production on the Socio-econmic Development of Peasants in Nasarawa State. The purpose of the study is to examine the impact of cassava Production on the socio-economic development of peasants in Nasarawa State.

The questions below are designed to study the issue under review. Your comment on question raised will be treated in confidentiality.

Thank you sir.

Idris Ali Mohammed

BSU/POL/Ph.D/10/5449

Interview Guide Questions

1. What are the levels of cassava production in Nasarawa State?
2. What are the conditions of peasants before the policy in the study area?
3. What are your sources of income?
4. Identify factors that will encourage cassava production in the study area?
5. Has the state cassava policy encourages production for market not consumption in the study area?
6. Can the state cassava policy brings about agro-industrialization?
7. How is cassava processed in Nasarawa State?
8. How many cassava processing centres in study area?
9. Mention the names of cassava products you consume in the study area?
10. How is cassava processed into gari in Nasarawa State?

FOCUS GROUP DISCUSSION GUIDE QUESTIONS

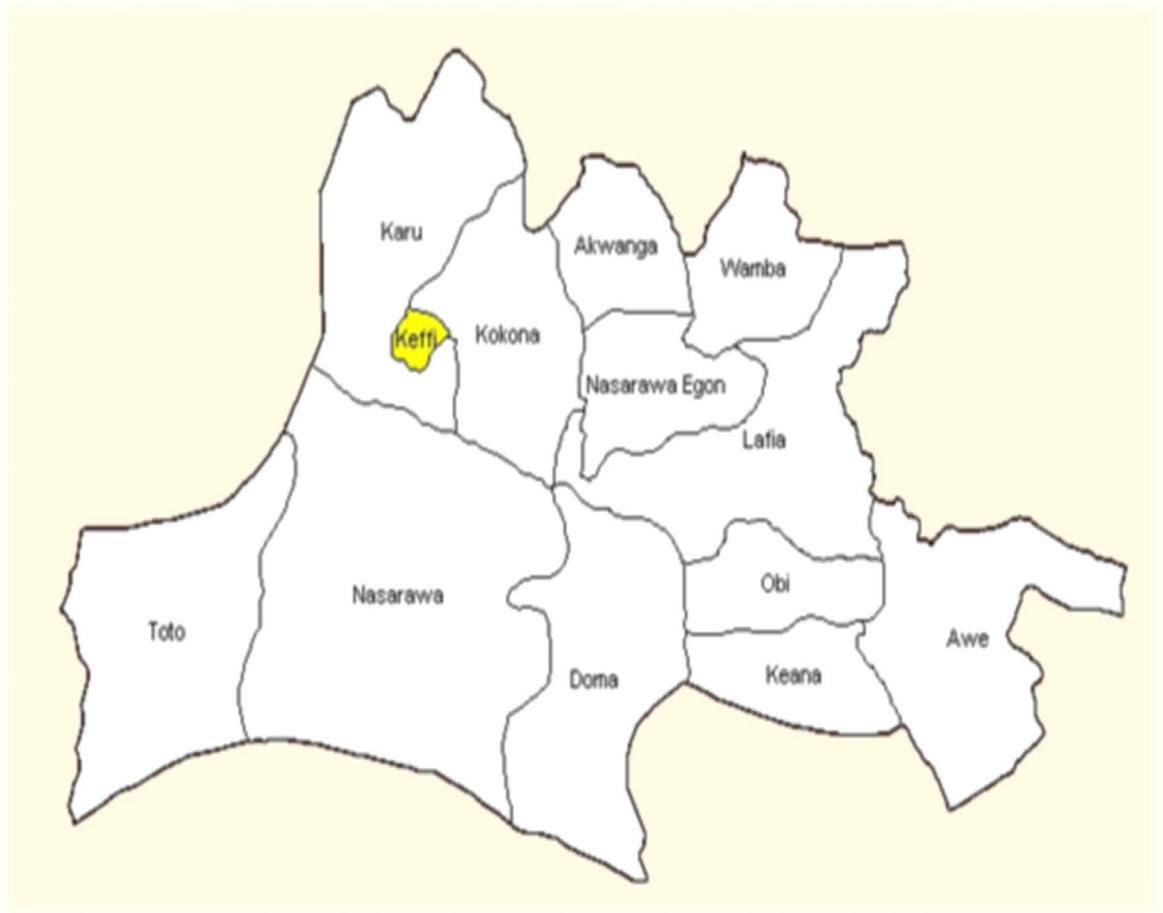
1. What is your motivation in cassava production? Why do you engage in cassava production?
2. Has cassava farming beneficial to you?
3. What are your challenges/problems as a cassava farmer?
4. Is availability of land a constraint on cassava production?
5. How can government policy influence cassava production?
6. Are you aware or have you benefited from any government intervention or programmes as a cassava farmer?

QUESTIONS GUIDE FOR STAFF OF AGRIC MINISTRY AND ADP, LAFIA

1. Why government intervens in cassava production in Nasarawa State?
2. What is the level of involvement of government in cassava production?
3. Is the cassava policy effective or not effective?
4. What is the resource productivity in cassava production?
5. What are the challenges of cassava production?

APPENDIX V

Map of Nasarawa State



APENDIX VI

Agricultural Zones of Nasarawa State

1. **Nasarawa South Agricultural Zone**
    - Lafia Local Government Area
    - Awe Local Government Area
    - Keana Local Government Area
    - Doma Lacal Government Area
    - Obi Local Government Area

2 Nasarawa Central Agricultural Zone

- Akwaga Local Government Area
- Kokona Local Government Area
- Nassarawa Eggon Local Government Area

Wamba Local Government Area

3 Nasarawa West Agricultural Zone

- Keffi Local Government Area
- Karu Local Government Area
- Nassarawa Local Government Area
- Toto Local Government Area

APENDIX VII

Names of Cassava Producing Communities Selected

1. Shabu
2. 2.Adudu
3. .Akun
4. 4.Ancho
5. Karmo
6. Ukya

APENDIX VIII

Calculation of Sample Size according to Yamane statistical formula

The sample size for this study is made up of 398 which are selected for the population of 52,500. The sample size was arrived at using Yamane(1964) statisticalformula. Yamane formular is widely used in statistics and social science researches to define the minimum sample size of the population.The formular from Yamane runs thus:

$$n = \frac{N}{1 + N(e)^2}$$

Where n=sample size

N=population

e= the level of precession

1=constant

$$n = \frac{52,500}{1 + 52,500\ (0.05)^2}$$

N=52,500

e=5% (0.05)

e^2=0.0025

$$n = \frac{52,500}{1 + 52,500 \times 0.0025}$$

$$n = \frac{52,500}{132}$$

n =398

APENDIX IX

What is the nature of land ownership in the study area?

Nature of land distribution, ownership and transfer

Types of land ownership/transfer		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inheritance	175	46.42	46.42	46.42
	Lease	69	18.30	18.32	64.74
	Sales/Purchase	48	12.73	12.73	77.47
	Government allocation	18	4.77	4.77	82.24
	Community	67	17.77	17.77	100
	Total	377	100	100	

Source: Field survey 2016

Inheritance= 175/100 x 377/1 =46.42%

Lease= 69/100 x 377/1 =18.30%

Sales/Purchase = 48/100 x 377/1 =12.73%

Government Allocation= 18/100 x 377/1 =4.77%

Community= 67/100 x 377/1 =17.77%

APPENDIX X

List of People Interviewed in the Study Area

Nasarawa West Agricultural Zone, 13-15/07/2016

1 Ukya

-Alh. Musa Yerima Vilage Head

-Usman Ogazuma
-Mohamed Kwana
-Jibrin Yusuf Aboki
-Luka Zagbayi
–Adamu Musa
-Awal Aboki –
-Musa Adamu
-Solomon Peter
- Simon Ayinaje
- Hauwa Haruna
- Isa Musa
-Sidi Baba
- Ayetu Joseph
- Mica Luka
-Musa Aboki
-Lukman Haruna
–Musa Mohamed
-Yusuf Aboki
–Ayuba Yunusa
-Ayuba Shekwolo
–Samu Yunusa
–Yohanna Ote
–Ohinoyi Usman
–Yakubu Adams
–Adamu Ogazuma
-Yunusa Ohikwo
-Larai Sani
–Angulu Salisu
--Dauda Shekwoduza
-Hawa Usman
–Bawa Yau
-Mamuda Mohammed
- David Solomon
-Akuki Titus-
-Hadiza Usman
- Maryam Mohamed

–Hussaina Abu
-Aisha Abubakar
-Ali Lamu
- Justina Labaran
- Samson Yau
-Yakubu Jibrin
-John Joseph
-James John
-Sunday Luka
-Lucky John
-Bature Bawa

2 **Karmo, 18-20/07/2016**

-Auta Birki Village Head
-Aminu Suleiman
-Amina Ubam
-Fatima Mohamed Sani
-Al-amin Tanko
-James Mika
–Godiya Musa
-Ali Gishiri
–Mika Atampa
-Gado Allananan
- Isa Ahana
- Ali Takalmi
–Easter Biri
-Paul Mika
-Ramatu Kampe
- Adiko Pari
-Baba Katipa
-Dauda Dadi
-Musa Llucky
-Raza Aure
-James Yohana
-Ali Zobe
-Kande Dogo
-Isa Ali
- Ali Thomas
-Baba Nura
-Aure Isa
-Paul Godiya
-Haske Sani
-Barnabas Dadi
-Birki Musa

-Isa Waziri –Barnabas Sabo
-Auta Bature
-Jacob Patari
–Usman Pari
-Godiya Galma
-Lukman Ubam
-Ali Ubam
-Easter Bature

3 **Shabu, 27-29/07/2016**

-Mallam Musa Manman Mai unguwa Ombi 2, Shabu
-Mohammed Ari Arashe Secretary, Nig. Cassava Growers Association, Nasarawa State Chapter
-Idris Usman Anyu Turaki Ombi 2
-Salisu Musa
-Endurance Kudu
-Usman Mohamed
–Labaran Mohammed
-Ali Yahaya
-Hassan Anyu
- Ismaila Isa
-Ali Ayuwa
-Labaran Musa
- Musa Dauda
- Zakari Ismail
- Mahmood Sabo
-Ismaila Shadow
–Yakubu Labaran
-Labaran Yusuf
–Maryam Isa
-Ali Labaran
-Isa Naam-
-Ayigbo Emanuel
-Salisu Ali
-Ali Dunuya
–Ahezi Kudu
-Awazi Emmanuel
-Ladi Amos
-Danjuma Naisla
-kudu Dogara
-Awazi Dauda
–Ladi Joseph

4 **Adudu, 4-6/08/2016**

-Mallam Abubakar Aba
-Ishowa David
-Mohamed Ahmed
-Joseph Ogba
-Rukaya Ibrahim
–Auwal Ali Ibrahim Zainab Lukman
–Ashezi Joseph
–Joseph Ugba
-Easter Ugba
–Mr. Terhimba Emmernuel
- Mohamed Ahmed
–Ibrahim Awal
-Andrew Terhingwa
- Dauda Ibrahim
-Azumi Yohana
–Lukman Hassan
–Emmanuel Kudu
-Yahuza Ibrahim
–Danladi Musa
- Hakimi Yakubu
–Alhari Ramatu
-Allananan Yakubu –Usman Mohammed
- Salem Akev
–Ishowa Christ

5 **Akun, 16-18/08/2016**

-Alh Mohamed Umbugadu Chief of Akun
-Adams Mark Nangba Sarki yaki Akun
-Kudu Emmanuel
-Iliya Iliya
-Sule Akun
-Awazi Umbugadu
–Asheri Joseph
-Mohammed Umbugadu
-Umbugadu Ali
-Joseph Akun
-Ladi Joseph
-Fatima Mohammed
-Mohammed Abubakar
-Sani Ali
-Isa Ayuba
-Yusuf Yusuf

-Usman Galadima
-Yusuf Ali
–Amina Mohammed Umbugadu
- Iliya Abubakar
- Mariya Mohammed
–Maryam Mohammed
–Zakari Alu
-Joseph Alu
-Alumbugu Haruna
–Zakari Alumbugu
-Musa Zakari
-Alizaga Umbugadu
-Ibrahim Maku
-Joseph Bashayi
-Usman Bahayi
-Zakari Haruna –Musa Ahmed

6 **Ancho, 22-23/08/2016**

-Mickel Sabo Okpu Chaiman Nig. Cassava Growers Associatio Nasarawa State Chapter
-Gloria Jacob
-Dogara Samu
-Mohamed Garba
-Danladi Kwanta
-Micheal Sabo
-Salomi John
-Yakubu Ancho
-Joseph Ancho
- Yakubu Dogara
–Silas Ancho
–Moses Samuel
-Umar Ali
-Umar Sanda
-Yakubu Sabo
-Mercy Jacob
-Jashua Jacob
-Daniel Sunday
-Moses Anthoney
-David Kwanta
-Asebe Samuel
-Danladi John
-Usman Para
-Danladi Yakubu
-Usman Sani Peter

-Musa Peter
-Obadiah Moses
-Obadiah Yaro
-Ramat Sani
-Joseph Ancho Samu
-Bukar Yaro

APPENDIX XII

List of People Interviewed During The Focus Group Discussion

1 Ukya, 5-6/07/2016

-Alh. Musa Yerima Vilage Head

-Usman Ogazuma
-Mohamed Kwana
-Jibrin Yusuf Aboki
-Luka Zagbayi
–Adamu Musa
-Awal Aboki –
-Musa Adamu
-Solomon Peter
- Simon Ayinaje

2 **Karmo, 8-9/07/2016**

-Auta Birki Village Head
-Aminu Suleiman
-Amina Ubam
-Fatima Mohamed Sani
-Al-amin Tanko
-James Mika
–Godiya Musa
-Ali Gishiri
–Mika Atampa
-Gado Allananan
- Isa Ahana
- Ali Takalmi
–Easter Biri
-Paul Mika
-Ramatu Kampe
- Adiko Pari
-Baba Katipa
-Dauda Dadi
-Musa Llucky
-Raza Aure
-James Yohana
-Ali Zobe
-Kande Dogo
-Isa Ali
- Ali Thomas
-Baba Nura

-Aure Isa
-Paul Godiya
-Haske Sani
-Barnabas Dadi

3 **Shabu, 11-12/07/2016**

-Mallam Musa Manman Mai unguwa Ombi 2, Shabu
-Idris Usman Anyu Turaki Ombi 2
-Salisu Musa
-Endurance Kudu
-Usman Mohamed
–Labaran Mohammed
-Ali Yahaya
-Hassan Anyu
- Ismaila Isa
-Ali Ayuwa

4 **Adudu, 10-11/08/2016**

-Mallam Abubakar Aba
-Ishowa David
-Mohamed Ahmed
-Joseph Ogba
-Rukaya Ibrahim
–Auwal Ali Ibrahim Zainab Lukman
–Ashezi Joseph
–Joseph Ugba
-Easter Ugba
–Mr. Terhimba Emmernuel

5 **Akun, 20/08/2016**

-Alh Mohamed Umbugadu Chief of Akun
-Adams Mark Nangba Sarki yaki Akun
-Kudu Emmanuel
-Iliya Iliya
-Sule Akun
-Awazi Umbugadu
–Asheri Joseph

6 **Ancho,01/08/2016**

-Mickel Sabo Okpu Chaiman Nig. Cassava Growers Associatio Nasarawa State Chapter
-Gloria Jacob

-Dogara Samu
-Mohamed Garba
-Danladi Kwanta
-Micheal Sabo
-Salomi John
-Yakubu Ancho
-Joseph Ancho
- Yakubu Dogara

APPENDIX XII

Research Questions

1. How is cassava produced in Nasarawa State?

2. What is the impact of cassava production on income and welbeings of peasants in Nasarawa State?

3. What are the challenges of cassava production in Nasarawa State?

4. What are the impact of government policy and intervention in the study area?

APPENDIX XIII

List of people meet during the Focus Group Discussion

1 **Ministry of Agriculture Lafia, 08/09/2016**

-Ismaila Murtala Mohamed
-Mr Joseph Ari
-Ibrahim Ali
- Murtala Sani
- Yakubu Daman
- Usman Lamus
- Kigbu Ismaila
- Idris Salis
- Zainab Suleimen
- Esther Yakubu

2 **Agricultural Development Project Lafia, 09/09/2016**

-Mr Steve Kphama Jao MD NADP Lafia
-Haj Hafsat Mohamed
–Mallam Suleiman Ibrahim

- Landi Shekwolo
- Lydi Samuel
- Osabo Muhammed
- Muhammed Ari
- Luckman Ibrahim
- Sani Mohammed
- Josia Joseph
- -Mr. Bulus Public Relation Officer NADP, Lafia

APPENDIX XI

Table 3: Showing the price of fertilizer: 2004-2009

Brand	Year	Government price
NKP	2004	2500
UREA	2004	2000
NPK	2005	2500
UREA	2005	2500
NPK	2006	3500
UREA	2006	3500
NPK	2007	3500
UREA	2007	3500
NPK	2008	3500
UREA	2008	3500
NPK	2009	3500
UREA	2009	4000

Source: Ministry of Agriculture, Lafia (2015)

Interviewees at Ministry of Agriculture and ADP, Lafia

1 **Ministry of Agriculture Lafia; 21/09/2016**

-Ismaila Murtala Mohamed
-Mr Joseph Ari
-Ibrahim Ali

2 **Agricultural Development Project Lafia, 21/09/2016**

-Mr Steve Kphama Jao MD NADP Lafia
-Haj Hafsat Mohamed
–Mallam Suleiman Ibrahim

APENDIX XVI

Levels of Cassava Production from 1990-2003 (tons)

Year	Nigeria	Cameroon	Togo
1990	19,043,008	1,587,872	592,867
1991	26,004,000	1,622,000	510,528
1992	29,184,000	1,636,000	452,093
1993	30,128,000	1,684,000	389,448
1994	31,005,000	1,715,000	531,526
1995	31,404,000	1,780,000	607,222
1996	32,050,000	1,848,000	548,316
1997	32,695,000	1,918,000	595,792
1998	32,698,000	1,965,950	579,381
1999	32,070,000	1,889,191	693,998
2000	32,810,000	191,830	7,000,699
2001	32,586,000	1,947,266	651,530
2002	34,476,000	2,200,000	729,708
2003	33,379,000	2,619,142	724,000

Source: FAO (2004)

APENDIX XVII

Cassava production by Zone (2002-2004)

Zone	2002	2003	2004
South-West	4,993,380	5,663,614	5,883,805
South-South	6,268,114	6,533,944	6,321,674
South-East	5,384,130	5,542,412	5,846,310
North-West	2,435,211	2,395,543	2,340,000
North-Central	7,116,920	7,243,970	7,405,640
Total	26,363,099	27,521,016	27,938,049

Source: Project Coordinating Unit (2005)

APENDIX XVIII

Cassava production by zone (2005-2007)

Zone	2002	2003	2004
South-west	6,283,142	6,458,911	6,755,316
South-south	6,821,674	7,139,452	7,483,139
South-east	5,987,220	6,321,739	6,641,855
North-west	2,410,025	2,652,944	2,653,812
North-central	9,335,816	9,848,712	984,925
Total			

Source: PCU (2008)

APENDIX XIX

Crop productions by farmers in ADPs and accelerated development area project:

11. Yam - 2,153 million tonnes
12. Sorghum - 1,953 million tonnes
13. Millet - 1,564 million tonnes
14. Cassava - 918,716 million tonnes
15. Maize - 488,396 million tonnes
16. Cowpeas - 474,450 million tonnes
17. Groundnuts - 197,910 million tonnes
18. Rice - 112,924 million tonnes
19. Cotton - 22,869 million tonnes
20. Considerable quantities of vegetables, mainly tomatoes, pepper and onions (Osuniogun and Oludimu, 1986).

APENDIX XX

Infrastructural Development in the ADPs/ADAPs

S/N	Project	Farm Service Centre	Development Centres	Rural Roads (Kms)	Dams	Boreholes	Wells	Building
.	Ayangba ADP	32	6	1623 improved 891 kms constructed	2	25	-	136
.	Lafia ADP	22	1	838 constructed 110 maintained	-	3	363 constructed 166 maintained	126
.	Bida ADP	59	5	125 maintained 405 constructed	Canals 94kms	-	-	132
.	Ilorin ADP	52	5	165 constructed 100 graded	-	4	-	16
.	Ekiti-Akoko ADP	27	-	80 graded	-	-	-	1
.	Oyo-North ADP	9	1	85 constructed 61 rehabilitated	7	5	145	6
.	Sokoto ADP	81	4	530 built 1,280 maintained	8	1,200	60 tube wells	64
.	Bauchi ADP	87	11	1,427 maintained	84	1,777	38 wells, 542 wash bores	304
.	Kano ADP	168	12	751 maintained	-	1,216	80 tube wells 421 wash bores	115
0.	Borno ADP	-	25	90 maintained	-	-	2 wells	6

1.	Imo ADP	34	-	200 constructed 228 improved	-	-	-	2
2.	Gongola ADP	30	1	32 improved	-	-	-	2
	Total	601	71	5,494 constructed 3,537 maintained	101	3,632	973 Wash bores	908

Source: Federal Agricultural Co-ordinating Unit (FACU), Ibadan

APENDIX XXI

Cassava demand estimates by presidential initiative by 2014 (tones)

Product	**Domestic**	**Export**	**Total**
Food	5,700,00	1,825,000	7,525,000
Starch	1,770,000	3,200,000	4,970,000
Livestock	15,622,000	75,621,248	91,243,248
Ethanol	900,000	2,700,000	3,600,000
Total	**23,992,000**	**83,346,248**	**107,338,248**

APENDIX XXII

Empowerment through the National Cassava Initiative

S/N	Name of group beneficiaries	Crop	Size (ha)	Location	LGA	Beneficiaries 10% (n)	State govt. 30% (n)	FGN 10%(n)	IFAD 50% (N)	cost/ ha	Total
1	Ugbagyercass. Coop. society	Cassava	1	Agaza	Keana	11,055.00	33,165.00				44,220.00
2	Kwaghsoner Cass. Farm coop	Cassava	1	Agono	Obi	11,055.00	33,165.00				44,220.00
3	Gbata Women Proc. Group	Cassava	1	Gbata	Wamba	11,055.00	33,165.00				44,220.00
4	Arum-Tumara Women. Proc Group	Cassava	1	Arum-Tumara	Wamba	11,055.00	33,165.00				44,220.00
5	KaiboMada RTEP grou	Cassava	1	K/Mada	Keffi	11,055.00	33,165.00				44,220.00
6	Slab casprod. Coop	Cassava	1	Adogi	Lafia	11,055.00	33,165.00				44,220.00
7	Umaru Ali Akurba	Cassava	1	Shabu	Lafia	11,055.00	33,165.00				44,220.00
8	Akpajeshi Farmers coop. Sec	Cassava	1	Yelwa	Toto	11,055.00	33,165.00				44,220.00
	Total					**88,440.00**	**265,320.00**				**353,760.00**

Source: Nasarawa Agricultural Development Programme (2009)

APENDIX XXIII

Women participation in cassava processing and other crops in the study area

S/No	Name of Group	Type of Activity	Location	Remarks
1	Army Barracks Women Group	Cassava processing into Garri	Keffi W/zone	Own a locally fabricated equipment
2	Kokona Women Group	Production and processing of cassava into Gari	Maiauri W/zone	Own a processing equipment (ADP)
3	Umaisha Women Group	Processing of fish	Umaisha W/zone	Adopted the smoking kind produced by the ADP
4	Toto Women Group	Production and processing of Cassava into Gari	Keffi W/zone	Work is done manually
5	Shabu Multi-Purpose Women Group	Alubo and G/nut oil processors	Lafia s/zone	Requested for G/nut oil extractor
6	Wamba Cooperative Women Group	Production and processing of cassava into Alubo	Lafia s/zone	Work done manually but requested for miller
7	Lafia Women Group	Production and processing of cassava into Gari	Lafia s/zone	Work done with a locally fabricated machine
8	Kan-Sakuwar Women Group	Production and processing of Cassava into Gari	Kan-sakuwa s/zone	Work done manually
9	Nasarawa –Eggon Women Group	Processing of G/nut into oil	N/Eggon S/zone	Work done manually
10	Toto Women Group	Processing of G/nut into oil	Toto w/zone	Work done manually

Source; NADP Newsletter (1999).

APENDIX XXIV

Names of cassava products consume most in the study area?

Table 26

Products	**Frequency**	**Percentage**
Gari	203	53.7
Alubo	69	18.3
Akpu	65	17.2
Roasted cassava	20	5.3
Boiled cassava	20	5.3
Total	**377**	**100**

Field Survey 2016

From table above 53.7% of the sampled farmers consume gari, 18.3% consume alubo, 17.2% consume akpu, 5.3% consume roasted cassava and 5.3% consume boiled cassava respectively. This indicates that majority of the respondents consume gari more than any other cassava product in the study area.

APENDIX XXV

Table 15: Nasarawa State Cassava Production Figure for 1997-2014

S/N	Year	Crop	Production (000MT)	Area (000HA)	Yield (MT/HA)
1	1997	Cassava	736.05	57.55	12.74
2	1998	,,	754.71	60.28	12.52
3	1999	,,	338.19	36.92	9.16
4	2000	,,	250.00	25.00	10.00
5	2001	,,	144.21	12.83	11.24
6	2002	,,	240.00	23.00	10.43
7	2003	,,	204.67	19.16	10.68
8	2004	,,	242.42	22.04	11.00
9	2005	,,	1115.94	79.71	14.06
10	2006	,,	1276.62	72.37	17.64
11	2007	,,	871.12	61.08	14.30
12	2008	,,	995.86	67.57	14.74
13	2009	,,	1034.59	70.93	14.59
14	2010	,,	1480.59	98.91	14.97
15	2011	,,	1957.70	120.75	16.21
16	2012	,,	2464.14	125.88	19.57
17	2013	,,	2514.50	130.40	19.28
18	2014	,,	2544.90	129.80	19.61

Source: NADP PME Department, Lafia

APENDIX XXVI

Table 16: Conditions of peasants in the study area

Conditions	Frequency	Percentage
Poor housing	45	11.9
High level of illiteracy	90	23.8
High rate of poverty	92	24.4
Lack of social amenities	150	39.7
Total	377	100

Source: Field Survey 2016

Federal office of statistic, 2004

APENDIX XXVII

Cassava Demand estimates by 2007 (tons)

Product	Export	Import	Import
Food	5,700,000	1,825,000	7,525,000
Starch	1,770,000	3,200,000	4,970,000
Livestock feed	15,622,000	75,621,248	91,243,248
Ethanol	900,000	2,700,000	3,600,000
Total	23,992,000	83,346,248	107,338,248

Source: FAO (2004)

APENDIX XXVIII

Conservative Estimates of Cassava Future Demands (tons) in Nigeria

Sector	Current alternative product use	Substitution (%)	Equivalent in fresh cassava root
Food	1,180,000	20	1,000,000
Starch	67,100	100	350,000
Livestock	1,200,000	20	1,000,000
Ethanol	20,900	100	2,000,000
Total	2,468,000		4,350,000

Source: Knipscheer, (2003)

.

APENDIX XXIX

Frequency of Cassava Consumption in Nigeria

State	1-2 times (%)	3-4 times (%)	More than 4 times (%)
Osun	29	36	33
AkwaIbom	29	39	33
Bayelsa	21	15	51
Edo	21	25	53
Imo	24	21	43
Kaduna	74	18	4
Kano	57	37	4
Kebbi	84	15	0
Kwara	27	38	35
Borno	65	28	4
Taraba	37	25	33
Zamfara	43	27	30

Source: Federal Ministry of health, Nigeria (2004)

APENDIX XXX

What is the Consumption Pattern of Cassava products?

Zone	Order of preference
South South	Gari, Akpu/Fufu
South East	Gari, Fufu, Akpu
North Central	Gari, Fufu, Starch
North East	Gari, Fufu, Abacha

Source: Kormawa and Akoroda (2003)

APENDIX XXXI

Table 17: Distribution of respondents according to the wellbeing of peasants in cassava production, 2004

Wellbeing		Frequency	Percent
Valid	Motor Cycle	52	13.79
	School/Medical fees	54	14.32
	Shelter	68	18.03
	Food	66	17.51
	Clothing	67	17.77
	Married more wives	64	16.97
	Car	06	1.59
	Total	377	100

Source: Field survey 2016

APPENDIX XXXII

Table 18: Distribution of respondents according to the wellbeing of peasants in cassava production, 2005

Wellbeing		Frequency	Percent
Valid	Motor Cycle	68	18.03
	School/medical fees	54	14.32
	Shelter	52	13.79
	Food	66	17.51
	Clothing	67	17.77
	Married more wives	64	16.97
	Car	06	1.59
	Total	377	100

Source: Field survey 2016

APPENDIX XXXIII

Table 19: Distribution of respondents according to the wellbeing of peasants in cassava production, 2006

Wellbeing		Frequency	Percent
Valid	Motor Cycle	54	14.32
	School/medical fees	52	13.79
	Shelter	66	17.51
	Food	68	18.03
	Clothing	67	17.77
	Married more wives	64	16.97
	Car	06	1.59
	Total	377	100

Source: Field survey 2016

APPENDIX XXXIV

Table 20: Distribution of respondents according to the wellbeing of peasants in cassava production, 2007

Wellbeing		Frequency	Percent
Valid	Motor Cycle	52	13.79
	School/medical fees	54	14.32
	Shelter	68	18.03
	Food	66	17.51
	Clothing	67	17.77
	Married more wives	64	16.97
	Car	06	1.59
	Total	377	100

Source: Field survey 2016

APPENDIX XXXV

Table 21: Distribution of respondents according to the wellbeing of peasants in cassava production, 2008

Wellbeing	Frequency	Percent

Valid	Motor Cycle	52	13.79
	School /medical fees	54	14.32
	Shelter	60	15.91
	Food	66	17.51
	Clothing	67	17.77
	Marry more wives	64	16.97
	Car	14	3.71
	Total	377	100

Source: Field survey 2016

APPENDIX XXXVI

Table 22: Distribution of respondents according to the wellbeing of peasants in cassava production, 2009

Wellbeing		Frequency	Percent
Valid	Motor Cycle	68	18.03
	School /medical fees	54	14.32
	Shelter	52	13.79
	Food	66	17.51
	Clothing	67	17.77
	Married more wives	60	15.91
	Car	10	2.62
	Total	377	100

Source: Field survey 2016

APPENDIX XXXVII

Table 23: Distribution of respondents according to the wellbeing of peasants in cassava production, 2010

Wellbeing		Frequency	Percent
Valid	Motor Cycle	52	13.79
	School /medical fees	54	14.32
	Shelter	68	18.03
	Food	66	17.51
	Clothing	67	17.77
	Married more wives	64	16.97
	Car	06	1.59
	Total	377	100

Source: Field survey 2016

APPENDIX XXXVIII

Table 24: Distribution of respondents according to the wellbeing of peasants in cassava production, 2011

Wellbeing		Frequency	Percent
Valid	Motor Cycle	120	31.82
	School /medical fees	60	15.91
	Shelter	60	15.91
	Food	66	17.51
	Clothing	67	17.77
	Married more wives	04	1.06
	Car	-	-
	Total	377	100

Source: Field survey 2016

APPENDIX XXXIX

Table 25: Distribution of respondents according to the wellbeing of peasants in cassava production, 2012

Wellbeing		Frequency	Percent
Valid	Motor Cycle	58	15.38
	School /medical fees	114	30.02
	Shelter	68	18.03
	Food	66	17.51
	Clothing	67	17.77
	Married more wives	04	1.06
	Car	-	-
	Total	377	100

Source: Field survey 2016

APPENDIX XC

Table 26: Distribution of respondents according to the wellbeing of peasants in cassava production, 2013

Wellbeing		Frequency	Percent
Valid	Motor Cycle	58	15.38
	School/medical fees	58	15.38
	Shelter	68	18.03
	Food	66	17.51
	Clothing	67	17.77
	Married more wives	60	15.91
	Car	-	-
	Total	377	100

Source: Field survey 2016

APPENDIX XCI

Table 27: Distribution of respondents according to the wellbeing of peasants in cassava production, 2014

Wellbeing		Frequency	Percent
Valid	Motor Cycle	68	18.03
	School /medical fees	54	14.32
	Shelter	60	15.91
	Food	60	15.91
	Clothing	60	15.91
	Married more wives	27	7.16
	Car	52	13.79
	Total	377	100

Source: Field survey 2016

APENDIX XCII

Table 8: Distribution of respondents according to range of income obtained from sales of cassava in the study area, 2004

Range of income(N)	Frequency	Percentage
10,000-50,000	65	17.2
50,000-100,000	88	23.3
100,000-150,000	77	20.4
150,000-200,000	64	16.9
200,000-25000	49	12.9
250,000-300,000	24	6.3
300,000-400,000	10	3.0
Total	377	100

Source: Field Survey 2016

APPENDIX XCIII

Table 8: Distribution of respondents according to range of income obtained from sales of cassava in the study area, 2005

Range of income(N)	Frequency	Percentage
10,000-50,000	49	12.9
50,000-100,000	88	23.3
100,000-150,000	77	20.4
150,000-200,000	24	6.3
200,000-25000	65	17.2
250,000-300,000	64	16.9
300,000-400,000	10	3.0
Total	377	100

Source: Field Survey 2016

Table 8: Distribution of respondents according to range of income obtained from sales of cassava in the study area, 2006

Range of income(N)	Frequency	Percentage
10,000-50,000	65	17.2
50,000-100,000	49	12.9
100,000-150,000	77	20.4
150,000-200,000	10	3.0
200,000-25000	88	23.3
250,000-300,000	24	6.3
300,000-400,000	64	16.9
Total	377	100

Source: Field Survey 2016

APPENDIX XCV

Table 8: Distribution of respondents according to range of income obtained from sales of cassava in the study area, 2007

Range of income(N)	Frequency	Percentage
10,000-50,000	77	20.4
50,000-100,000	88	23.3
100,000-150,000	65	17.2
150,000-200,000	64	16.9
200,000-25000	49	12.9
250,000-300,000	24	6.3
300,000-400,000	10	3.0
Total	377	100

Source: Field Survey 2016

APPENDIX XCVI

Table 8: Distribution of respondents according to range of income obtained from sales of cassava in the study area, 2008

Range of income(N)	Frequency	Percentage
10,000-50,000	65	17.2
50,000-100,000	24	6.3
100,000-150,000	77	20.4
150,000-200,000	64	16.9
200,000-25000	49	12.9
250,000-300,000	88	23.3
300,000-400,000	10	3.0
Total	377	100

Source: Field Survey 2016

APPENDIX XCVII

Table 8: Distribution of respondents according to range of income obtained from sales of cassava in the study area, 2009

Range of income(N)	Frequency	Percentage
10,000-50,000	10	3.0
50,000-100,000	88	23.3
100,000-150,000	77	20.4
150,000-200,000	64	16.9
200,000-25000	49	12.9
250,000-300,000	24	6.3
300,000-400,000	65	17.2
Total	377	100

Source: Field Survey 2016

APPENDIX XCVIII

Table 8: Distribution of respondents according to range of income obtained from sales of cassava in the study area, 2010

Range of income(N)	Frequency	Percentage
10,000-50,000	64	16.9
50,000-100,000	88	23.3
100,000-150,000	77	20.4
150,000-200,000	65	17.2
200,000-25000	49	12.9
250,000-300,000	24	6.3
300,000-400,000	10	3.0
Total	377	100

Source: Field Survey 2016

APPENDIX XCIX

Table 8: Distribution of respondents according to range of income obtained from sales of cassava in the study area, 2011

Range of income(N)	Frequency	Percentage
10,000-50,000	153	40.5
50,000-100,000	141	37.3
100,000-150,000	59	15.9
150,000-200,000	20	5.3
200,000-25000	3	0.7
250,000-300,000	1	0.2
300,000-400,000	-	-
Total	377	100

Source: Field Survey 2016

APENDIX XCX

Table 8: Distribution of respondents according to range of income obtained from sales of cassava in the study area, 2012

Range of income(N)	Frequency	Percentage
10,000-50,000	89	23.5
50,000-100,000	88	23.3
100,000-150,000	77	20.4
150,000-200,000	64	16.9
200,000-25000	49	12.9
250,000-300,000	6	1.5
300,000-400,000	4	1.0
Total	377	100

Source: Field Survey 2016

APPENDIX XCXI

Table 8: Distribution of respondents according to range of income obtained from sales of cassava in the study area, 2013

Range of income(N)	Frequency	Percentage
10,000-50,000	75	20.2
50,000-100,000	88	23.3
100,000-150,000	77	20.4
150,000-200,000	64	16.9
200,000-25000	49	12.9
250,000-300,000	20	5.3
300,000-400,000	4	1.0
Total	377	100

Source: Field Survey 2016

APPENDIX XCXII

Table 8: Distribution of respondents according to range of income obtained from sales of cassava in the study area, 2014

Range of income(N)	Frequency	Percentage
10,000-50,000	24	6.3
50,000-100,000	10	3.0
100,000-150,000	77	20.4
150,000-200,000	64	16.9
200,000-25000	49	12.9
250,000-300,000	65	17.2
300,000-400,000	88	23.3
Total	377	100

Source: Field Survey 2016

APENDIX XCXIII

Traditional and Improved Cassava Processing Technologies/Equipments

Processing stage	Traditional Technology	Improved Technology
A. GARI 1. Peeling	Knife made of bamboo, flint or metal	Mechanizer peeler, motorized peeler, hand peeler, hand rasper
2. Washing	Local calabash bowl	Aluminium tank
3. Grafting	Rough stone, prickly trunk of palms sheet/tin iron pieced nail on one side	Mechanized Grater, Motorized Grater, Hammed mill, disk grater, hand grater
4. Fermentation	Heavy stone on heavy weighted cloth or nylon bag	Batch fermentation in aluminum tank, locally made hydrolic or mechanical
5. Dewatering Processing	Heavy stone on heavy weighted cloth nylon bag (for several days)	Hydrolic jack press, screw press, parallel board press, upgraded trade press for few minutes
6. Sieving	Women baskets, suspended cloth pieces holding mash	Improved pulverizere.g drum sieve, rotating seize
7. Frying/Revasting	Cash iron pan over wood fire	Upgraded roaster, solar dryer, kiln type dryer
8. Sifting	Women basket	Improved pulverizer and sifter
B. LAFUN 1. Peeling	Knife made of bamboo, flint or metal	Mechanical peeler, motorized peeler, hand resper
2. Soaking	Local calabash	Aluminum tank
3. Pulverizing	Women basket	Improved pulverizer
4. Dewatering	Heavy stone on heavy weighted cloth or nylon bag	Hydraulic press, mechanical press
5. Drying	Cash iron pan over wood fire	Drum dryer, solar dryver
C. STARCH 1. Peeling	Knife made of bamboo	Mechanical peeler, cassava filter, motorized peeler
2. Washing	Calabash bowl	Aluminium tank
3. Grafting	Sheet or iron pierced with nail	Power grater, motorized grater, disc grater

	on one side	
4. Dewatering	Heavy stone on heavy weighted cloth or nylon bag	Hydraulic press, screw press
5. Drying	Cash iron pan over wood fire	Engraved fryer, solar dryer
6. Packaging	Local jute bag	Scale polythene bag
D. FUFU 1. Peeling	Local knife	Hand peeler- (mechanized)
2. Washing	Local calabash bowl	Aluminium tank
3. Grafting	Rough stone	Motorized grater, rotatary grater
4. Dewatering	Heavy stone on heavy weighted cloth	Mechanized press, hydraulic press
5. Packaging	Local jute bag	Hydraulic polythene bag

Sources; Journal of International Women's Studies Vol. 9 May, 2000